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## SAMENA Council Leaders' Summit 2026

Intelligent Networks For Sovereign & Sustainable Futures



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# Contents



## Interview

- 14 **In the Age of Accelerated Change, Governance and Innovation Must Move Together**  
*Bocar A. BA, CEO and Board Member of SAMENA Telecommunications Council*

## Satellite

- 22 **ST Engineering iDirect unveils Intuition Foresight to automate network management and service provisioning**
- 36 **Will LEO Satellite Direct-to-Cellular Networks Make Traditional Mobile Networks Obsolete?**
- 39 **Orbit unveils MPT40: A new standard for compact, high-performance, combat ready SATCOM**

## Event

- 12 **Dubai to host Leaders' Summit 2026 as regional stakeholders align on digital continuity and strategic priorities**

## Telecommunications

- 06 **Leading the Future: Intelligent, Inclusive, Unstoppable**
- 08 **Techco2.0: The Intelligent Growth Framework Defining the AI Era**
- 23 **Turkcell pioneers next-gen connectivity with major push into 5G-Advanced, AI infrastructure, and 6G networks**
- 25 **stc group reports record network usage at the Two Holy Mosques during Ramadan Kareem**
- 26 **Character, Care, and Resilience: The UAE's Digital Sector Remains the Conduit of New Opportunities**
- 29 **MTN Group reports exceptional 2025 results, unveils evolved platform strategy**
- 31 **From network APIs to network AI agents — building the agentic future of connectivity with Google Cloud**
- 33 **Pakistan enters 5G era**

## Cybersecurity & Enterprise IT

- 11 **Women in UAE complete GenAI courses at higher rates than men despite enrolment gap**
- 20 **6 trends in AI compliance influencing how GCC companies operate**

## Editor's Note



Dear Readers,

As we bring you the April 2026 edition of Teletimes International, the global telecom and digital infrastructure landscape is entering a phase defined not just by innovation—but by alignment, resilience, and strategic intent. Across the Middle East, Asia, and beyond, we are witnessing a decisive shift toward intelligent, AI-driven networks, where connectivity is no longer an end in itself, but the foundation of sovereign, secure, and sustainable digital futures.

This edition is anchored by the SAMENA Council Leaders' Summit 2026, convening in Dubai under the theme "Intelligent Networks for Sovereign & Sustainable Futures." As highlighted in our coverage, the industry is moving beyond broad transformation narratives toward execution—where spectrum strategy, AI deployment at scale, and the convergence of terrestrial and non-terrestrial networks are shaping real-world outcomes.

At the same time, the pace of technological evolution continues to accelerate. From AI-native operating models and intelligent automation to the rise of sovereign AI and data governance frameworks across the GCC, the industry is redefining how value is created and delivered. Telecom operators are evolving into digital service enablers, while cybersecurity, compliance, and infrastructure resilience are becoming central pillars of long-term strategy. The convergence of satellite, cloud, and terrestrial networks further signals a future where connectivity is seamless, ubiquitous, and deeply integrated into every sector of the economy.

As Teletimes marks over two decades of publication, our mission remains clear: to provide decision-makers with credible insights, meaningful dialogue, and a platform that reflects the pulse of the industry. We are grateful to our partners, contributors, and readers who continue to trust us as a voice of authority across telecom, satellite, enterprise IT, and digital innovation.

We hope you find this edition insightful and engaging.

**Khalid Athar**  
Chief Editor



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# Leading the Future: Intelligent, Inclusive, Unstoppable

Vivek Badrinath, Director General, GSMA

It was a great honour to open MWC26 Barcelona, my first as Director General of the GSMA. When you have a moment like this, you often find yourself looking back and it just so happens that next week we celebrate one hundred and fifty years since Alexander Graham Bell made the first phone call – the first step on a path that would lead us where we are today. One hundred and fifteen years later, the first GSM call was made in Europe built on what became a truly global standard that would unlock global scale and global innovation.

And this year we celebrate 20 years of MWC in wonderful Barcelona. Back then 3G had just launched, and the Motorola Razr V3 was the phone of the moment. Today there are almost 9 billion connections, and our industry connects 5.8 billion people - 70% of the world's population. Last year we contributed \$7.6 trillion, or 6.4% of global GDP and this will grow to over \$11 trillion by 2030 as we contribute to an increasingly broad list of industries and sectors.

Over the last twenty years, the mobile industry has seen incredible growth. We became the nervous system of our digital world but today the landscape is changing. While anniversaries are an opportunity to marvel at the journey travelled, they are also an opportunity to look up and look ahead. As we do this, the next steps of the journey are clear and before us rise three mountains we must climb together.

First, we must complete the 5G journey. 5G is the modernisation of society itself. In a future where cities think for themselves, factories run autonomously, and robotics are part of daily life, investing in 5G standalone is essential and countries that hesitate will fall behind. In markets where adoption is at least 10%, operators are seeing double the revenue



growth compared to those without it. 5G standalone could add up to \$187 billion to mobile revenues by 2030. Just look at the US, China, and the Gulf States: they have ports, factories, hospitals – all running on 5G Advanced. These are not just proofs of concept, they are real-life operations and services in commercial use. But in Europe, we are losing ground. There is much more to be done to unlock the potential of 5G, in particular, slicing, to support these use cases.

Today, more than anything, the lack of scale is hindering operators from making the necessary investments. We welcome the Commission's review of merger guidelines and have worked on concrete proposals to support this essential work. If we want to realise the full promise of 5G, and lay a healthy foundation for 6G, we must complete the 5G standalone journey.

Now, the second mountain we face is rising to the AI challenge. AI is transforming the world and the way we relate to it. And as telcos we have a crucial role to play because we are a foundational layer of the AI stack. Our infrastructure allows AI to run at the edge, in real time, for billions. As an industry we have embraced AI, and operators are investing at scale. From Deutsche Telekom's €1 billion AI factory, to China Mobile doubling its AI investment by 2028, to AT&T going all in on agentic AI. Indeed, there is incredible opportunity, but the research also shows that today's AI models fall short of telco-specific needs. If we want to unlock the full benefits of AI for telco, we need telco-grade AI. We recently announced Open Telco AI, a new initiative where we will work with partners to:

- **Launch a suite of open-telco models and datasets**

- **Open access to more compute for model training**

- **Benchmark progress through the Telco Capability Index**

- **And build community**

But along with all this opportunity, we also have a responsibility. There are over 7,000 languages in the world, yet AI is trained in only a handful. A new AI language gap is emerging, on top of the gaps we already face – the coverage and the usage gap. If people cannot use AI in the language they speak, they are excluded from the opportunities it creates and the relevance of the models is vastly reduced.

Today, 300 million people are not yet covered by a mobile network and 3.1 billion people who live within coverage, are not using mobile internet for a variety of reasons. That means, 3.4 billion people are still not connected. Access to mobile money, precision agriculture, digital education and health services is already transforming millions of lives, now we must make them accessible to billions.

It's crucial that we close these gaps and at the GSMA, we are working with partners to address challenges like handset affordability, digital skills and security. And of the 7,000 languages I mentioned, 2,000 are spoken in Africa so this is an exciting market to prove a new, open AI approach. We also recently launched the first Open Swahili Reasoning Model and I'm also pleased that 2 new compute providers have committed to support building a series of open African-language models. The next AI breakthrough could come from anywhere but only if everyone is connected.

This brings me to our third mountain, as we continue forward in our journey, another reality becomes unavoidable: safety. Today, scammers are winning the arms race - using technology to stay ahead, exploit gaps between sectors and countries, and adapt. This global threat needs urgent, coordinated action. As an industry, we are collectively committed to fighting back. We're investing

in cutting edge defences, focusing on the safety and security of our handsets and networks and sharing intelligence with all digital partners to improve detection.

GSMA Open Gateway is a key tool here. The Scam Signal API, for instance, has improved scam detection rates by up to 40%, and is now being rolled out globally. Indeed, we will continue to do our part as an industry to address this challenge, but the reality is that the majority of scams happen beyond the control of operators. This is not a challenge that will be solved by one industry alone. We must all be united against scams – operators, security experts, ecosystem players, government and consumers – to build a safer digital future for us all. The journey that lies ahead won't be easy. The challenges are massive, but the opportunities are exciting.

It's clear we are in a new era, seamless interworking is confronted by the new, legitimate requirements of sovereignty, resilience, and protection. If we are to remain the nervous system, today, more than ever, we have a responsibility, to grow, to evolve, and to become the bridges between countries, industries and people. Because even as the global landscape shifts the world still needs a seamless connection.

And we can only deliver this if we preserve what has always powered our progress: global standards, global scale and global innovation. Our standards got us here - nobody wants to go back to the days where we had to change phones when we travelled. Our scale comes from our global market of almost 9 billion connections enabling us to scale up supply chains and bring down costs. And all of this drives global innovation, from the most sophisticated industrial 5G applications to funky video snippets to mobile money.

Global standards. Global scale. Global innovation. They brought us here and they will drive us forward, but we must work relentlessly to preserve them. If we achieve this, I believe we can ensure the best ideas, from everywhere, are the ones that shape a better future for us all. ■

## GSMA and Zindi launch African AI safety challenge to shape global standards for trustworthy AI

The GSMA and Zindi have launched the African Trust & Safety LLM Challenge, a landmark initiative designed to help define the next generation of global AI safety standards.

Unveiled at MWC26 Barcelona, the challenge is part of GSMA's support for the development of AI in Africa and positions Africa at the forefront of one of the most urgent questions in artificial intelligence: How to ensure powerful language models remain safe, reliable, and aligned across diverse real-world environments.

As gen-AI systems scale rapidly into financial services, healthcare, telecommunications, education, and government platforms, safety failures carry increasing societal and economic risk. Yet most existing AI evaluation frameworks are built around a narrow set of dominant global languages and contexts.

With more than 2,000 languages, widespread multilingualism, dialect mixing, and culturally nuanced communication patterns, Africa presents a rigorous stress test for modern AI. Ensuring AI systems perform safely under these conditions is not only essential for Africa, but has global implications for how AI can be deployed responsibly.

The African Trust & Safety LLM Challenge will run from 4 March to 19 April 2026 on the Zindi platform, offers a total prize pool of \$5,000 USD and is open to participants across Africa and globally. It will tap into Zindi's global community of more than 100,000 data scientists and AI practitioners across 180+ countries to systematically identify vulnerabilities in African-trained and Africa-deployed LLMs. ■

# Techco2.0

## The Intelligent Growth Framework Defining the AI Era

**Allen Tang, President of ICT Marketing & Solution Sales, Huawei Middle East & Central Asia**

Global telecom operators are shifting from small AI pilots to industrialized deployments focused first on OPEX efficiency and better customer experience, especially via AI-powered care, virtual agents, and network operations automation. They are investing in cloud-native OSS/BSS and modern data platforms as prerequisites, while vendors embed AI and GenAI into OSS/BSS to enable intent-driven, increasingly autonomous networks. At the same time, operators are exploring “networks for AI” models to open new revenue streams, supported by AI “factories,” stronger governance, and tighter partnerships with technology leaders.

Artificial intelligence is now recognized as a core enabler of telecom operators’ TechCo transformation. After adopting the Techco1.0 framework to guide this evolution, operators are entering a new phase in which AI sits at the centre of global telecom strategy.

In line with rapid technology development trends, Huawei has enhanced its Techco1.0 framework with a new blueprint for growth—one that redefines how operators compete, how industries operate, and how individuals experience technology. We call

this blueprint Techco2.0 that is more than a digital transformation plan; it represents a structural shift in how value is created, delivered, and scaled in the AI era.

At the core of Techco2.0 lies the D.N.A. Growth Model, a re-architecture of the fundamental elements that underpin modern digital economies. It reframes connectivity, computing, data, models, platforms, and scenarios as dynamic, interdependent components of intelligent growth. Together, they form a new operating logic for organizations seeking to thrive in a world increasingly shaped by intelligent agents, inference-centric computing, and scenario-driven innovation.

### A New Architecture for Intelligent Growth

The first major shift in the D.N.A. model is the evolution of connectivity. For decades, telecom networks were designed to connect people to people. Today, the paradigm is shifting toward connecting people to intelligent agents, and agents to each other. Networks such as Huawei’s MI and the emerging 3A architectures are transforming connectivity into a living, adaptive fabric capable of supporting autonomous

decision-making and real-time inference. In this new landscape, connectivity is no longer a passive utility. It becomes the nervous system of the AI ecosystem.

Computing is undergoing a similarly profound transformation. The industry’s early focus on training ever-larger models is giving way to a more pragmatic reality: inference is where value is realized. The future belongs to computing architectures optimized for low-latency, high-efficiency inference across cloud, edge, and device. This requires AI-ready data centres, heterogeneous compute platforms, and distributed intelligence that can operate seamlessly across environments. Training builds intelligence, but inference operationalizes it, and operationalization is where economic impact emerges.

Data, long described as the “new oil,” is finally being treated as a productive factor rather than a passive resource. Techco2.0 reframes data as an active input into value creation, requiring real-time analytics, cross-domain integration, and governance frameworks that enable safe, scalable reuse. In this model, data is not something organizations collect. It is something they activate.

Models, too, are evolving. While general-purpose AI models have captured global attention, the next wave of competitive advantage will come from domain-specific, proprietary models that encode industry knowledge and scenario-specific expertise. These models deliver higher accuracy, reduce hallucinations, and become strategic intellectual property. In the AI era, a company’s model becomes its moat.

Platforms are expanding from single-business systems into intelligent digital ecosystems. Legacy IT architectures built around business silos cannot support the horizontal intelligence required for AI-native operations. The new generation of platforms integrates connectivity, cloud, data, and applications into unified environments that enable end-to-end automation, cross-domain intelligence, and rapid scenario deployment.

And finally, scenarios, the real battleground of AI competitiveness, are shifting from resource-based approaches to know-how-driven intelligence. AI thrives in well-defined scenarios where data, models, and workflows converge. Scenario intelligence becomes the new competitive currency.

### The Three Pillars of AI-Driven Transformation

Techco2.0 brings the D.N.A. model to life through three transformation pillars: AI-Advanced Business, AI-Native Operations, and AI-Driven Infrastructure.

**The first pillar, AI-Advanced Business,** focuses on reinventing value through intelligent experience. For individuals and families, this means seamless, personalized, anticipatory services, from smart home orchestration to context-aware mobile experiences. For industries, it means one-stop enablement through the integration of networks, cloud, and AI. Operators evolve from bandwidth providers to strategic partners offering Model-as-a-Service, quantum communications, and industry-specific



AI agents. Crucially, AI also unlocks new revenue models, turning user experience into a monetizable asset through premium assurance, smart home subscriptions, and converged cloud services.

**The second pillar, AI-Native Operations,** reimagines how organizations work. Instead

of relying on manual tools and rule-based systems, AI-native operations introduce digital agents, predictive analytics, and automated troubleshooting. This shift delivers measurable impact: a 20 percent reduction in mean time to repair, a 1.6 percent reduction in churn, and a 20 percent drop in customer complaints. Operations



The solution lies in AI-native data centre design, open operating systems, and heterogeneous compute architectures.

Data monetization is another challenge. Many organizations still treat data as a compliance burden rather than a strategic asset. Real-time marketing, precision targeting, and internal data activation are essential to unlocking value.

Operational transformation is equally critical. Manual tools and rule-based systems cannot scale in the AI era. The future belongs to hybrid teams of domain experts and digital agents, supported by automated workflows and knowledge-driven operations.

**A Strategic Vision for the Operator of 2026**

Techco2.0 aligns with a broader global shift identified by leading industry analysts such as BCG: operators must evolve from connectivity providers to data-driven digital service providers. This transformation requires open ecosystems, scalable infrastructure, and a commitment to continuous innovation. With 95 percent of modern applications dependent on open-source software, collaboration becomes a strategic imperative.

Future-proofing requires investment in agentic operations, domain-specific models, and cross-domain integration. The organizations that succeed will be those that build intelligently, operate natively, and innovate continuously.

**The Blueprint for the AI Future**

Techco2.0 is more than a framework. It is a strategic agenda for the AI era, one that integrates technology, operations, and business into a unified model for intelligent growth. It offers a path for organizations to move beyond digital adoption and become AI-native leaders.

The future belongs to those who embrace intelligence not as a tool, but as a foundation. Techco2.0 is the blueprint for that future. ■

move from reactive to predictive, powered by spatial-temporal analytics that anticipate traffic patterns and optimize performance in real time.

**The third pillar, AI-Driven Infrastructure,** establishes the foundation for intelligent growth. Connectivity becomes programmable and experience-centric, with 5G-A delivering up to 10 Gbps and deterministic assurance. Computing becomes resilient and heterogeneous, supported by AI-ready data centres that can handle large-scale clusters, something 95 percent of today's data centres cannot do. Edge and mobile AI extend intelligence to the periphery, enabling real-time inference, high-uplink applications, and self-healing networks. Infrastructure becomes a strategic asset, not a cost centre.

**Innovation at the Heart of Techco2.0**

Several innovations underpin the Techco2.0 framework. The agentic AI platform represents a major leap forward, evolving from basic digitalization to fully agentic cloud-native infrastructure. Platforms like Huawei ModelArts enable rapid model development, deployment, and lifecycle management, making AI accessible to organizations of all sizes.

Data governance is another cornerstone.

By integrating more than 300 data assets across domains, organizations can achieve real-time decisioning and closed-loop optimization. Data becomes a strategic asset that fuels intelligent operations and personalized services.

In the consumer domain, intelligent experience is being redefined across both mobile and fixed broadband. On the mobile side, 5G-A networks deliver unprecedented speeds and deterministic quality, enabling differentiated user experiences. On the fixed side, gigabit home networks powered by FTTR bring intelligence into every room, supported by smart home agents and converged cloud services.

Industry-specific ecosystems are also emerging, from NPU-as-a-Service to Model-as-a-Service platforms that democratize AI for small and medium enterprises. These ecosystems make AI accessible, affordable, and actionable.

**Overcoming the Barriers to Intelligent Growth**

Despite the momentum, significant challenges remain. Legacy systems pose one of the biggest obstacles. Most data centres were not designed for AI workloads and lack the density, efficiency, and flexibility required for large-scale clusters.

# Women in UAE complete GenAI courses at higher rates than men despite enrolment gap

Women in the UAE are completing Generative AI (GenAI) courses at higher rates than men, even as participation levels remain below the global average, according to new insights from Coursera.

Coursera's latest report, "One Year Later: The Gender Gap in GenAI" suggests that once women engage in AI-focused learning, persistence and follow-through are strong. However, fewer women are entering GenAI learning pathways relative to men.

Globally, women's participation in GenAI learning is increasing. Women represented 36% of GenAI enrollments in 2025, up from 32% in 2024. Among enterprise learners, participation rose from 36% in 2024 to 42% in 2025, reflecting accelerating adoption of AI skills.

**Entry, not capability, may be the barrier**

The report highlights that in several markets, including the Middle East, the primary barrier for women in GenAI learning may be entry rather than performance. In the UAE, the women's completion rate for GenAI content is 2.4 percentage points higher than men's, but women currently represent only 24% of GenAI enrolments in the UAE. Additionally, women's enrolment share is declining by 1% year-on-year, indicating that the participation gap has widened.

This distinction matters. Completion rates are often viewed as a proxy for engagement and skill acquisition. Higher female completion rate suggests that when access barriers are reduced, women participate fully in advanced digital upskilling.

**Course design linked to stronger participation**

Beginner-friendly GenAI courses that emphasise real-world application tend to attract stronger female participation



**Dr. Alexandra Urban,**  
*Learning Science Research Lead at Coursera*

globally. For example, the introductory course in the Google AI Essentials series — designed with no prerequisites — has achieved 41.2% female enrolment and attracted more than 250,000 female learners worldwide. The course combines accessible language, practical use cases, and visible representation, including a female instructor prominently featured throughout.

Across the platform, application-driven GenAI courses in areas such as education, productivity tools, and workplace integration have seen female participation approach parity in some cases. These courses present GenAI as a practical tool for productivity and problem-solving rather than abstract technical theory, often linking AI tools to goals learners care about, such as improving teaching, writing, or creative work.

The findings suggest that when AI skills are framed as practical, accessible, and directly tied to career relevance, participation broadens.

Dr. Alexandra Urban, Learning Science Research Lead at Coursera, said: "Across our data, we see a clear pattern: when women in the UAE gain access to GenAI

learning, they not only keep pace with men — they often outperform them in completing courses. This tells us the issue is not capability or motivation, but access and opportunity. Closing the gap means making GenAI relevant to real jobs, easy to start, and visibly welcoming to women at every stage of their careers. If those conditions are in place, the UAE has an enormous pool of motivated and resilient women ready to help shape the country's AI-powered future."

**Implications for the UAE's digital workforce**

As the UAE continues advancing its ambitions in AI and digital transformation, expanding women's participation in GenAI learning could play an important role in strengthening workforce readiness.

The report outlines several approaches that can support more inclusive participation, including:

- **Designing beginner-level courses with clear real-world applications**
- **Ensuring visible representation and inclusive pedagogy**
- **Expanding access through localisation and partnerships**
- **Pairing GenAI skills with complementary human capabilities, such as Critical Thinking**

One year after Coursera's initial "Closing the Gender Gap in GenAI Skills" playbook, the global picture shows measurable progress. While disparities remain in some markets, the data indicates that where enabling conditions are in place, women are enrolling, persisting, and succeeding at higher rates. In the UAE, the completion advantage among women signals strong potential. The challenge now may lie less in capability and more in widening pathways to entry. ■



## Dubai to host Leaders' Summit 2026 as regional stakeholders align on digital continuity and strategic priorities

### Teletimes Report

Dubai is set to host the SAMENA Telecommunications Council's Leaders' Summit 2026 on April 1st at Atlantis The Palm, under the patronage of the Telecommunications and Digital Government Regulatory Authority (TDRA), with private-sector collaboration extended by Huawei. The gathering comes at a time when regional and global dynamics are placing increased emphasis on coordination across digital infrastructure, investment, and policy.

The decision by the SAMENA Council to proceed as scheduled follows consultations with UAE-based stakeholders and industry participants across the region. This is in view of the fact that digital networks, operating as critical infrastructure across sectors, require continuity in leadership engagement. In practice, convening decision-makers at this stage would support alignment on priorities that affect market stability, infrastructure resilience, and long-term investment direction both in the UAE and the neighboring region.



**H.E. Eng. Majed Sultan Al Mesmar**  
Director General of TDRA

Taking place shortly after Eid al-Fitr, the Leaders' Summit 2026, carrying the theme "Intelligent Networks for Sovereign & Sustainable Futures", is positioned as an early post-holiday touchpoint for the UAE and wider GCC ecosystem. This timing is important for recalibrating institutional and commercial agendas. As a result, stakeholders are expected to

focus on sustaining execution momentum, particularly in areas where coordination between regulators, operators, and technology providers remains essential. The overall agenda of the SAMENA Council Leaders' Summit 2026 is expected to address a shift from broad technology narratives toward more operational and policy-driven priorities. Among the anticipated highlights is a focused dialogue on the 6 GHz band and early positioning toward WRC-27, where spectrum allocation decisions will shape capacity and service evolution over the coming decade. Artificial intelligence applications are also expected to feature prominently, with attention to deployment at scale across network operations and enterprise use-cases, and also on nationals aspiring to pursue sovereign AI development.

Telecom operator business transformation will form another core area of discussion, particularly in relation to new private-centered monetization approaches. Such models are driven by the need to extract greater value from network assets, data capabilities, and platform integration.

In practice, they signal a transition from traditional connectivity provision toward more diversified digital service frameworks.

The Summit is also expected to address emerging hybrid connectivity paradigms that combine terrestrial and non-terrestrial networks, alongside the growing relevance of space-based infrastructure. Space sustainability and orbital governance, reflecting increased satellite activity and the need for coordinated regulatory approaches. Leadership discussions will also extend to broader shifts in the technology and international business landscape, including investment patterns, supply chain considerations, and cross-border collaboration dynamics.

Alongside these forward-looking themes, attention will be given to infrastructure protection and network resilience. Increasing interdependence across cloud environments, data centers, and multi-layered connectivity systems, driven by both scale and complexity. For operators and policymakers, this creates a



requirement for aligned frameworks that ensure continuity under varying external conditions.

The UAE's role as the longstanding host market for the SAMENA Council Leaders' Summit reiterates its position as the preferred, coordinated digital market, where regulatory direction, operator strategy, and technology deployment

remain closely aligned. The market's continued engagement through the Leaders' Summit should contribute to reinforcing confidence across the regional ICT ecosystem.

According to Bocar A. BA, CEO of the SAMENA Council, "Maintaining structured dialogue among industry leaders is essential to navigating both immediate challenges and longer-term transitions in the digital economy. The Summit, in this context, functions as a platform for aligning strategic direction across sectors and geographies. To support participation from international stakeholders, dedicated travel and hospitality arrangements have been established in partnership with AMH Tourism. These arrangements are intended to streamline access for attending leaders and facilitate engagement at a time when in-person coordination remains a priority."

With participation expected from across the South Asia, the Middle East, Africa, Central Asia, and South Asia, the Leaders' Summit 2026 is positioned as a working forum for advancing dialogue on policy alignment, investment priorities, and ecosystem development. Continued engagement, driven by the need to balance opportunity with external pressures. In practice, the outcomes of this dialogue are likely to influence how the region's digital infrastructure and services evolve in the near to medium term. ■

### Why the SAMENA Council Leaders' Summit Matters Now

The region is operating in a period of heightened uncertainty, driven by geopolitical tension and shifting economic signals. As a result, digital infrastructure is no longer a background enabler but a frontline system requiring active coordination across policy, operations, and investment.

The convening of the SAMENA Council Leaders' Summit 2026 with the patronage of the Telecommunications and Digital Government Regulatory Authority reflects the UAE's approach to maintaining alignment between regulators, operators, and technology stakeholders. In practice, this coordination supports continuity in infrastructure development, clarity in regulatory direction, and stability in market expectations.

At the same time, ICT the sector is entering a more complex phase. Spectrum positioning toward WRC-27, scaled deployment of artificial intelligence, and the integration of terrestrial and non-terrestrial networks are becoming interdependent decisions with long-term implications.

For stakeholders within the UAE and across the GCC and the wider SA-ME-NA region, participation serves a defined purpose. It enables early alignment on priorities, reduces fragmentation in technology adoption, and reinforces market confidence at a time when policy and investment signals carry increased weight.

# In the Age of Accelerated Change, Governance and Innovation Must Move Together

**Bocar A. BA**, CEO and Board Member of SAMENA Telecommunications Council, shares insights on adapting regulatory frameworks, ensuring infrastructure resilience, and navigating the great convergence of digital and space technologies

*Interview: Khalid Athar*



**Teletimes:** How would you describe the digital landscape as we move through 2026?

**Bocar A. Ba:** The digital landscape in 2026 reflects a period where significant infrastructure investments are maturing across the SA-ME-NA region. Over the past decade, operators have invested heavily in spectrum, fiber networks, data centers, and next-generation mobile infrastructure. These investments are now translating into networks and platforms capable of supporting governments, enterprises, and consumers reliably and at scale.

Across the region, telecom operators collectively continue to invest tens of billions of dollars annually in spectrum, fiber expansion, mobile infrastructure, and data center capacity, while modernizing networks toward 5G-Advanced and

introducing AI-driven network automation and new applications. This is truly reflective of a sustained commitment by our industry to long-term digital development.

Connectivity is also expanding beyond traditional terrestrial networks. Satellite systems, hyperscale cloud infrastructure, and regional data centers are converging with telecom networks to form a resilient and integrated digital ecosystem. So, we can say that in many ways, we are witnessing a growing convergence between digital and space technologies, where satellites not only enable global communications but also support environmental monitoring, disaster response, and navigation systems that digital platforms increasingly rely upon.

**TT:** What is required from the regulatory

**environment to support current transformation, especially at a time when technological innovation is accelerating and governance frameworks must also evolve more rapidly than in the past?**

**Ba:** Telecom infrastructure projects span many years, often requiring multi-billion-dollar capital commitments. Sustaining transformation requires regulatory frameworks that are clear, stable, and supportive of long-term investment. Operators need certainty around spectrum allocation, licensing conditions, and infrastructure deployment policies, for example.

Regulations have to adapt to the emerging reality of infrastructural change. That is, as I like to say, the “great convergence” of terrestrial networks, satellite systems,



*Sustaining transformation requires regulatory frameworks that are clear, stable, and supportive of long-term investment*



cloud platforms, and AI. Policies that allow innovation while ensuring security, reliability, and alignment with national priorities are essential.

We are living in an age of acceleration where artificial intelligence is evolving rapidly, digital platforms are scaling globally at unprecedented speeds, and data flows across borders almost instantaneously. Governance frameworks therefore cannot remain purely reactive. Regulators increasingly need adaptive approaches, including collaborative policy design, regulatory sandboxes, and mechanisms that allow innovation to advance while maintaining trust and accountability.

In the SA-ME-NA region, regulators have increasingly demonstrated that engagement with industry drives better outcomes, and the SAMENA Council’s own industry leadership activities are both a witness and an enabler in this observation. Institutions such as the UAE’s TDRA are among the key supporters and providers of platforms for dialogue that align investment, policy, technology deployment, and market confidence, ensuring digital transformation remains sustainable and inclusive.

**TT:** Aside from regulation, on which key priorities do you see progress happening now, particularly when global connectivity gaps remain and nearly one-third of humanity still lacks reliable digital access?

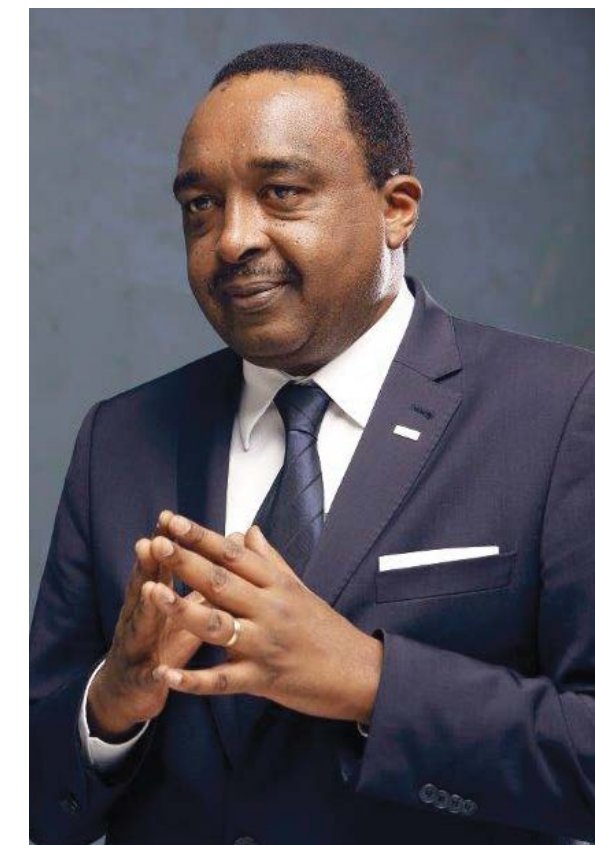
**Ba:** I am compelled to say that

Infrastructure resilience is now an utmost priority. Ensuring continuity in the communications infrastructure is essential for economic stability and public trust. Therefore, Operators are increasingly focusing on network redundancy, secure international connectivity, and robust cloud and data center operations. The convergence of terrestrial and satellite networks adds another layer of resilience, enabling service continuity even in challenging circumstances.

Another priority is advancing network capabilities. 5G-Advanced and AI-enabled networks enable new enterprise services, industrial automation, and real-time digital applications. These capabilities are critical to sustaining growth and competitiveness across the region.

Recognizably, at the same time, the global connectivity divide remains a significant challenge. However, when nearly one-third of humanity remains offline, we can objectively see that the issue cannot simply be technological only but also economic and social. The next phase of development must therefore focus on intelligent connectivity networks that are secure, resilient, and capable of transforming digital access into real opportunity for communities and economies. Fortunately, with progress in AI, numerous use-cases and new possibilities can be created to accelerate closing of connectivity and usage gaps.

**TT:** Who do you see as key partners in driving digital growth in the region, and how important is alignment between



**governments, industry, and the broader digital ecosystem in shaping innovation pathways?**

**Ba:** Innovation today spans telecommunications, cloud infrastructure, artificial intelligence, cybersecurity, and digital finance simultaneously. For this reason, alignment between governments, industry leaders from the telecom service and network technology domains, and broader ecosystem participants is critical. Structured public-private collaboration allows standards, policies, and technology development pathways to evolve in ways that benefit the entire digital economy.

Together, all stakeholders directly help create an environment where the digital economy can grow in a resilient and inclusive manner. And it is the SAMENA Council’s role to help convene all these actors by providing timely as well as time-sensitive deliberation forums, with the intent to encourage dialogue that aligns market conditions, investment decisions, technology deployment, and regulatory

policies across the region.

**TT:** How is the SAMENA Council evolving its partnerships to meet the demands of the region?

**Ba:** The SAMENA Council continues to deepen collaborations that translate into practical outcomes. Our partnerships with global industry associations and international organizations, such as the WBBA, WAA, among others, bring key subject focus and emerging technology

**TT:** Cybersecurity has become one of the defining challenges of the digital age. How should governments and industry think about digital trust moving forward, especially in volatile times?

**Ba:** Let us first understand that when digital systems are resilient, investment and innovation flourish. When vulnerabilities undermine confidence, the entire ecosystem is affected.

Building cyber resilience therefore requires

**Ba:** With Operators investing in energy-efficient equipment, advanced cooling systems, and AI-driven network optimization that dynamically reduces unnecessary energy consumption, environmental sustainability has visibly become a critical consideration. For the SAMENA Council addressing this issue means correlating digital growth with market responsibility and promoting it as such. Operators, technology providers, and policymakers are increasingly focused on integrating sustainability into planning, operations, and investments.

Satellite systems and digital platforms now support climate monitoring, smart energy management, and more efficient resource utilization across industries, enabling technology to contribute directly to environmental responsibility. So, we see that digital technologies themselves are also powerful tools for environmental stewardship.

**TT:** What is the focus of the SAMENA Council Leaders' Summit 2026, particularly as the global ICT community gathers in Dubai during a period of geopolitical uncertainty?

**Ba:** The SAMENA Leaders' Summit 2026 will focus on industry leadership, market confidence, infrastructure resilience, and coordinated digital development. We see these to be the most important areas in the current contexts.

Telecom networks must continue to operate reliably, supporting economic activity, public services, and societal needs, even if geopolitical dynamics change. In such moments, in any case, demonstrating market confidence and operational stability becomes critical.

We should recognize that technology progress does not pause during periods of uncertainty. On the contrary, these are precisely the moments when dialogue and collaboration in redirecting technological progress become even more important. Dubai has long served as a trusted global meeting point for the digital industry, and

the continuation of the Summit reflects the importance of maintaining cooperation and forward-looking leadership in supporting the market and its stakeholders.

Focus areas of the Summit include intelligent networks, expansion and operationalization of 5G-Advanced, convergence between terrestrial and satellite networks for resilience, growth and protection of cloud and data center infrastructure, cross-sector coordination to ensure digital infrastructure supports financial systems, logistics, government services, and enterprise platforms, and preparation for WRC-27, among other issues of relevance.

**TT:** Given the recent escalation in tensions between nations and its impact on regional markets, how should investors perceive the UAE investment environment, particularly in the ICT sector, and what signal should the market send about confidence and resilience?

**Ba:** The recent tensions in the Middle East have unsettled markets broadly, and there is no denying of this. The disruptions are clear, with investors reassessing risks.

However, it is important to separate headline-driven volatility from the underlying fundamentals of the UAE investment market. The UAE has some of the strongest fiscal buffers in the region, and this means long-term economic fundamentals of the Gulf, including the UAE, remain intact even as geopolitical risks fluctuate. This should give the ICT industry confidence.

For our industry, long-term demand drivers remain strong. Digital transformation, connectivity expansion, and enterprise technology adoption are structural trends that are fairly immune to short-term volatility. Continued investment by operators and technology providers in 5G-Advanced or "5.5G", cloud infrastructure, AI enabled networks, and data centers, and we already know of LEO systems entering the region, all these reflect confidence in sustained market growth.



*The next phase of development must therefore focus on intelligent connectivity networks that are secure, resilient, and capable of transforming digital access into real opportunity for communities and economies*

needs and trends into regional discussions. In the context of broadband development, such partnerships are critical from both infrastructure development as well as experience-centric device and network standardization perspectives. Moreover, these collaborations also support preparation for future spectrum planning and the continued evolution of wireless and satellite-enabled networks.

Engagement with broadband, wireless standardization, and digital economy initiatives ensures that the region stays aligned with global developments as they shape the dynamics of the region and the industry. We will see this year ITU's Plenipotential Conference, PP26, and next year WRC-27, both of which are key global activities and could have long-lasting impact on global digital development over the next five years.

cooperation between governments, industry, and international organizations. Shared frameworks, transparency, preparedness, and coordinated response mechanisms are essential for maintaining digital trust across borders.

We can easily say that trust is the foundation of the digital economy. As societies become more dependent on digital infrastructure, cybersecurity becomes not only a technical matter but also an economic and strategic imperative that must be addressed and constantly remain a living priority.

**TT:** How are you addressing sustainability in the context of growing digital infrastructure, and how can digital technologies contribute more broadly to environmental monitoring and climate resilience?

What investors and partners need to see now is stability in operations, clarity in policy direction, and continuity of strategic projects. The SAMENA Council feels that the UAE investment environment, especially in ICT, is resilient and forward looking, and that fundamental drivers of digital economy growth will remain relatively constant. Maintaining confidence requires consistent communication from industry and regulators, an emphasis on resilient infrastructure, and continued alignment of investment with national and regional digital development goals. This is a key reason why we are still aiming to hold the Leaders' Summit at this time, and it is a privilege to do so with the patronage of the TDRA.

**TT:** Finally, what outcome are you hoping to see from the upcoming Leaders' Summit, and more broadly

**what will determine whether this era of technological convergence ultimately benefits humanity?**

**Ba:** The primary goal is ecosystem alignment. When regulators, operators, technology providers, and investors share a clear understanding of actual and not merely perceived risks and priorities, decision-making becomes easier and digital infrastructure becomes more resilient, efficient, and capable of supporting economic growth.

I strongly believe success in this era will not be measured only by faster networks or more advanced technologies, but by the extent to which digital and space innovation expands opportunity, strengthens cooperation between nations, and contributes to a more sustainable world. ■

## From Connectivity to Capability

# Rethinking Digital Development through Global Collaboration

H.E. Eng. Majed Sultan Al Mesmar, *Director General of TDRA UAE*

The Telecommunications and Digital Government Regulatory Authority (TDRA) enters 2026 with a clear vision: connectivity alone is no longer a sufficient measure of digital progress. What matters is how digital systems translate into real national capability, improving how people live and how the nation competes.

That vision is rooted in lessons drawn from domestic implementation and international engagement, guided by the directives of the UAE's leadership. At the United

regulation. Fixed frameworks cannot keep up. TDRA is updating its regulatory models to support innovation without losing system integrity, improving how it monitors the sector, coordinating across government, and responding at the right pace.

Technology adoption cycles are accelerating, driven by market dynamics and rising customer expectations. This reinforces the need for regulatory agility. Frameworks must keep pace with

execution, and more consistent outcomes across sectors. This follows the whole-of-government model that the UAE has built over the past decade.

At the national level, this system is structured across three core layers. The first is telecommunications infrastructure, designed to ensure reliability, coverage, and performance. The second is government transformation, where services are delivered digitally by default. The third is digital public infrastructure: shared platforms that enable secure data exchange, digital identity, and smooth service integration.

Each layer serves a distinct purpose: infrastructure provides capacity. Government transformation determines how that capacity is used. Digital public infrastructure ensures that this use is secure and able to grow. When these layers work together, the system can deliver services before citizens need to ask for them.

TDRA's role is to maintain that coherence through regulatory oversight, planning, and coordination across public and private sectors. It must also stay ahead of how new technologies will change the rules.

The same thinking guides TDRA's international work. Through the World Summit on the Information Society (WSIS), the ITU, and the UN Global Digital Compact, the UAE has focused on practical implementation, showing how integrated digital systems can be built and sustained. These frameworks are valuable, but their effectiveness depends on how well they connect. Where coordination between them breaks down, national

implementation suffers.

As AI, data regulation, and cybersecurity risks grow more complex, the need for coherence across international mechanisms grows with them. Infrastructure development, policy dialogue, and guiding principles must function as a coordinated system. Without that coordination, countries duplicate effort and lose time.

Beyond multilateral forums, TDRA works bilaterally and through industry bodies such as the SAMENA Telecommunications Council. These partnerships are operational, not ceremonial. They focus on sharing implementation experience, comparing regulatory approaches, and identifying

***Digital systems must enable real access to services, participation in economic life, and public trust in how digital systems work.***

where systems can be improved. Digital transformation requires continuous refinement, informed by what the UAE has learned at home and what works elsewhere. As digital infrastructure becomes more interconnected globally, TDRA's engagement with partners has deepened accordingly, building shared responses to data governance and cybersecurity threats.

TDRA measures progress by what digital infrastructure delivers, not by what it promises. By aligning telecommunications, government services, and international engagement under a single framework, the UAE has built a system designed to keep pace with what comes next. That work continues under the "We the UAE 2031" vision, with a clear test: whether digital systems produce measurable gains for the people and the economy they are meant to serve. ■

***The Telecommunications and Digital Government Regulatory Authority enters 2026 with a clear vision: connectivity alone is no longer a sufficient measure of digital progress.***

Nations General Assembly in December 2025, the UAE articulated a perspective that has since become central to TDRA's work. The global challenge has moved beyond connectivity gaps. The real divide is in how countries turn digital tools into development outcomes. The disparities in digital integration directly influence how nations grow, compete, and deliver for their societies.

The operating context in 2026 is different from even two years ago. Artificial intelligence now runs through both public and private services. Data governance has grown more demanding, with governments paying closer attention to security and sovereignty. Cyber threats are more frequent and more sophisticated.

These shifts demand a different kind of

technological change, while safeguards remain firmly in place to protect customers and ensure stability.

Despite significant advances in global connectivity, structural gaps persist. Billions remain unconnected, while many who are connected operate within fragmented or underperforming digital environments. For TDRA, the challenge is clear. Infrastructure expansion must be measured by outcomes. Digital systems must enable real access to services, participation in economic life, and public trust in how digital systems work.

TDRA's mandate has evolved accordingly. Telecommunications, digital government, and regulatory policy are not treated as separate domains, but as interdependent components of a unified national system. The result is coordinated planning, faster



H.E. Eng. Majed Sultan Al Mesmar  
*Director General of TDRA UAE*



## 6 trends in AI compliance influencing how GCC companies operate

Across the GCC, national growth strategies, with Saudi Arabia's Vision 2030, the UAE's National AI Strategy 2031, and Qatar's national roadmap, place AI at the centre of economic diversification. McKinsey estimates AI adoption at roughly 84% across GCC organisations, with a potential \$320 billion economic impact for the Middle East by 2030. As deployment accelerates, regulatory compliance is a defining factor separating ambition from sustainable scale. Shaffra, an AI research and applications company building autonomous AI teams for enterprises and governments, sees six clear shifts reshaping how companies operate.

### 1. Regulation is accelerating adoption in high-stakes sectors

Government entities, financial services, telecom, aviation, and large semi-government organisations are moving fastest. These sectors operate at scale, face strict efficiency mandates, and function under constant regulatory oversight. Healthcare and energy are advancing more cautiously due to safety and data sensitivity. In many cases, the more regulated the industry, the faster AI deployment progresses. However, rapid scaling

also exposes governance weaknesses, particularly where documentation, ownership, and oversight mechanisms are underdeveloped.

### 2. Compliance is prerequisite for scale

Over the past year, 88% of Middle East CEOs have reported generative AI uptake. Today, organisations increasingly require audit trails, explainability, clear data lineage and residency controls, defined performance thresholds, and enforceable human oversight mechanisms. With one in four Middle East consumers citing privacy as a primary concern, compliance is being treated as a post-deployment validation exercise; it is a structural requirement for scaling AI responsibly.

### 3. Sovereign AI and data residency are shaping architecture

AI governance in the GCC is being influenced less by standalone AI laws and more by data protection and cybersecurity frameworks. The UAE's federal data protection law, Saudi Arabia's PDPL under SDAIA, and Oman's PDPL reinforce lawful processing and cross-border controls. In highly regulated

sectors such as banking, healthcare, energy, and telecommunications, data residency and local control over models are strategic imperatives. Sovereign AI is evolving from a policy ambition into an operational requirement affecting infrastructure, vendor selection, and system design.

### 4. Human accountability is being reasserted

When organisations deploy AI without defining who owns the decision, when human escalation is required, and what the system is permitted or restricted from doing, they create either over-reliance or under-utilisation. Without clearly defined ownership and documented review controls, accountability weakens and regulatory exposure increases.

For instance, DIFC reinforces responsible AI use in personal data processing. High-impact decisions involving legal standing, fraud, employment, healthcare guidance, or public sector determinations that affect citizens need to involve human oversight, while AI handles speed, consistency, and automation of repetitive tasks. High-impact decisions should involve accountable human oversight.

### 5. Governance maturity slows deployment activity

Many organisations are AI-active but still developing governance maturity. Common governance gaps are structural rather than technical. Multiple pilots often run in parallel, tool adoption is fragmented, and accountability is split across IT, legal, risk, and business functions. Growing enterprises often lack a central AI governance owner, a comprehensive use-case inventory, consistent vendor and model risk assessment, and formal escalation protocols. Policies may exist at the board level, yet it is not consistently embedded into day-to-day operations. Addressing this gap requires governance to be built into workflows from the outset.

### 6. Continuous auditing is discipline

Studies indicate that a majority of ML models degrade over time, through model drift, hidden bias, or misuse vulnerabilities. Initial audits frequently reveal undocumented use cases, weak access segmentation, insufficient logging, and unclear review protocols. Effective governance requires compliance with international and local data residency rules, structured risk tiering, data lineage validation, access controls, bias testing, performance benchmarking, and defined incident response procedures. High-impact systems warrant quarterly reviews supported by continuous monitoring, while lower-risk applications still require periodic reassessment. Governance is increasingly measured through evidence rather than policy statements. Boards are asking for dashboards, logs, and audit artefacts — not policy PDFs.

Governance is being considered as part of AI infrastructure. Compliance frameworks are evolving into operational architecture embedded within systems, workflows, and accountability models. The organisations that will lead in the GCC are those that design governance at the same time they design capability, ensuring AI scales with discipline rather than risk. ■

## HPE accelerates secure, scalable production-ready AI through new innovations with NVIDIA

HPE has announced a significant expansion of the NVIDIA AI Computing by HPE portfolio, redefining how enterprises deploy and scale AI. Through deep co-engineering, HPE delivers integrated, validated systems that accelerate time-to-value while addressing critical security and governance requirements.

### Simplifying Enterprise AI Adoption

HPE is refreshing its security-focused AI solutions to help organizations securely operationalize AI. A core component is the expansion of HPE Private Cloud AI, a turnkey "AI factory" co-engineered with NVIDIA. High-profile organizations like the Ryder Cup and the Dallas Cowboys are already leveraging this platform to drive transformative initiatives.

Key updates to the HPE Private Cloud AI and ProLiant portfolio include:

- **Massive Scalability:** New network expansion racks allow deployments to scale up to 128 GPUs, supporting larger, more demanding workloads with a consistent operational experience.
- **Confidential Computing:** HPE ProLiant DL380a Gen12 servers are being certified for Fortanix Confidential AI, leveraging NVIDIA technology to protect sensitive data and models on-premises.
- **Agentic Security:** Partnering with CrowdStrike, HPE provides AI-powered threat detection and response specifically designed to protect AI infrastructure and autonomous agents.
- **Advanced Blueprints:** Systems now feature the latest NVIDIA AI Enterprise software, including NVIDIA AI-Q for customizable AI agents and NVIDIA Omniverse for digital twins.

- **Blackwell Integration:** NVIDIA RTX PRO



6000 Blackwell Server Edition GPUs are now available across all HPE AI factory configurations.

### Industry-Specific AI Solutions

New multi-workload solutions, co-designed with NVIDIA, simplify deployment for edge intelligence, retail, and biomedical research. These systems combine HPE ProLiant servers with NVIDIA Spectrum-X networking and BlueField DPUs.

HPE is also introducing the NVIDIA RTX PRO 4500 Blackwell Server Edition GPU for edge deployments and small-language models. A specific retail blueprint has been integrated to streamline the deployment of AI shopping assistants.

### Networking and AI at Scale

Announced at NVIDIA GTC 2026, HPE is introducing networking solutions using HPE Juniper Networking routers to connect distributed AI deployments. Additionally, HPE expanded its sovereign AI factories with a new generation of systems built on the NVIDIA Vera Rubin architecture, designed to handle the world's most demanding AI workloads.

By controlling the full stack—from hardware and silicon to security and automation—HPE is building a comprehensive ecosystem that enables enterprises to transition from AI experimentation to scalable, production-ready outcomes. ■



ST Engineering iDirect has unveiled Intuition Foresight, an advanced orchestration and management suite designed to deliver AI-driven network intelligence and unified control across multi-vendor, multi-platform, and multi-network environments. The solution advances the company's Intuition strategy and marks a significant step toward the realization of self-healing, autonomous networks.

Intuition Foresight addresses the industry's persistent challenges in managing the complexity of integrating diverse satellite systems and is designed to support operators at every stage of their modernization journey. The single pane of glass interface layers on top of existing infrastructure, incorporating third-party vendors and applications while leveraging AI and automation, without disrupting current operations. Its modular design enables incremental upgrades, parallel network operations, network convergence, and smooth migration, ensuring a customer-centric approach to decision-making and timelines.

The solution is built upon three vital functional areas that are requirements for modernization and advanced network operations:

• **Simplified Configuration Management**

To accelerate service delivery, Intuition

Foresight adopts a single pane of glass interface that centralizes network and service management, streamlining configuration and provisioning. Its standardized, declarative APIs convert service priorities into precise network configurations, reducing manual effort and enhancing operational efficiency across diverse environments. Its compatibility across multiple ST Engineering iDirect networks and third-party systems unlocks the full potential of applications such as Global Bandwidth Management, delivering greater value throughout the unified ecosystem.

• **Observability and Data Infrastructure**

Intuition Foresight unifies network data and events from every deployed element into a centralized data lake. The solution prepares, correlates, and enriches this data with third party inputs and contextual intelligence to create a normalized, AI ready dataset. This foundation powers real time visualization, advanced analytics, and deeper operational insights.

• **AI-Driven Automation**

By applying advanced AI models, Intuition Foresight aims to shift networks from reactive responses to predictive and proactive operations. With 360° closed-loop automation, the solution is designed

to detect anomalies, diagnose issues, and recommend mitigation actions before end-users are impacted. Building on recent customer trials and proofs of concept, ST Engineering iDirect is actively developing a suite of applications for root cause analysis, anomaly detection, and threat monitoring, which will be integrated into the solution as it evolves.

"With Intuition Foresight, we are addressing the modernization challenges of our customers by combining advanced AI capabilities with our deep domain expertise in satellite communications," said Sridhar Kuppanna, Chief Technology Officer at ST Engineering iDirect. "This approach simplifies complex operations and gives operators a clear path to express the full potential of their networks by bringing together intelligent automation with predictive insights that shift operators from reactive to proactive management."

Intuition Foresight positions operators for the next era of satellite networking. By enabling networks to self-diagnose and self-heal, the suite minimizes downtime, improves service reliability, and enhances user experiences. Through multiple AI-driven proofs of concept, ST Engineering iDirect is showcasing how intelligent automation can transform operational models across commercial, mobility, and government markets. ■

## Turkcell pioneers next-gen connectivity with major push into 5G-Advanced, AI infrastructure, and 6G networks

Turkcell and Huawei have signed three significant Memorandum of Understanding (MoUs) at the Mobile World Congress (MWC) 2026. Through these agreements, the parties further strengthened their long-term strategic collaboration to shape the future of telecommunications.

The agreements encompass advancing AI capabilities and applications, accelerating the evolution of 5G networks, and driving forward-looking research into next-generation and autonomous network technologies, demonstrating the partners' shared commitment to innovation leadership and next-generation digital transformation.

**Partnership I: Strategic Collaboration on 5G Evolution and Leading Network Innovations**

Under the first agreement, the companies aim to develop sustainable and technologically leading networks by leveraging the latest technologies within Turkcell's infrastructure.

The strategic collaboration places a strong focus on 5G Advanced technologies, aiming to accelerate the testing, validation, and commercialization of innovative solutions. Within this framework, the parties will work together to expand the 5G SA architecture, speed up 5G service launches across consumer (B2C), home (B2H), and enterprise (B2B) segments, and develop innovative solution designs to address increasing connectivity demands and emerging traffic needs. The partnership also covers the development of 5G use cases, including support for initiatives such as 5G New Calling, and FWA applications. In addition, the collaboration encompasses advanced technology implementations such as AI-powered fault detection and predictive maintenance solutions in fiber



infrastructure, cross-data center GPU pooling and collaborative AI training infrastructure services, as well as Super WAN wide-area network solutions that deliver secure, high-capacity, and low-latency connectivity for enterprise customers.

**Partnership II: Strategic Collaboration on 6G and Autonomous Network Technologies**

The second agreement establishes a strategic collaboration framework focused on technical research and innovation in the evolution of AI-native autonomous network architectures. The partnership aims to develop forward-looking strategies toward the goal of fully autonomous networks, while advancing the research, testing, and validation of next-generation network technologies.

Within the scope of this collaboration, Turkcell and Huawei plan to conduct joint studies on AI-native autonomous networks, next-generation technology research and use cases. The partnership also includes joint demonstrations, proof-of-concept activities, and contributions

to relevant standardization efforts as key components of the cooperation.

**Partnership III: Strategic Collaboration to Unlock AI Power**

As the third agreement within the broader strategic partnership, Turkcell and Huawei have signed a Memorandum of Understanding to collaborate on advancing artificial intelligence infrastructure, cloud platforms, and next-generation AI applications. The collaboration aims to strengthen AI capabilities, accelerate the development of innovative use cases, and support the creation of a robust AI ecosystem in Türkiye.

Through this partnership, Turkcell and Huawei will jointly explore the development of advanced AI platforms, support the training of next-generation AI models, and work together on solution co-design, proof-of-concept initiatives, and industry-focused AI applications. By combining Huawei's global expertise in AI and cloud technologies with Turkcell's strong digital infrastructure and ecosystem leadership, the collaboration aims to accelerate intelligent transformation across industries. ■



stc



## stc group reports record network usage at the Two Holy Mosques during Ramadan Kareem

stc group, a leading digital enabler, reported record growth in network traffic and demand for connectivity services at the Two Holy Mosques during Ramadan, driven by the increasing number of Umrah pilgrims and rising demand for connectivity and internet services in Makkah and Madinah.

Network indicators showed that data traffic at Masjid Al-Haram in Makkah increased by more than 21%, with over 48% of internet traffic carried over the 5G network, representing an 18% increase compared to last year. At the Prophet's Mosque in Madinah, data traffic rose by more than 40%, with 5G accounting for more than 48% of total internet traffic, marking a 67% increase compared to the

previous year.

Voice traffic also increased, with the network handling 5% more calls at the Grand Mosque and 14% more at the Prophet's Mosque compared to last year. These figures reflect the network's operational efficiency and its ability to accommodate the significant rise in the number of visitors and pilgrims while maintaining high service quality.

To meet the growing demand and the rising number of visitors during Ramadan, stc group upgraded more than 600 towers in Makkah and over 470 in Madinah, ensuring that pilgrims at the Holy Mosques can enjoy a seamless digital experience. By upgrading

key network sites and continuously enhancing its infrastructure, stc group is committed to providing reliable, high-quality connectivity for millions of pilgrims, worshippers, and visitors throughout the holy month.

The network also recorded an increase in the number of international roaming customers arriving in the Kingdom for Umrah and visits, with growth exceeding 10% compared to previous years. This reflects the growing demand for digital and connectivity services at the Two Holy Mosques and highlights stc group's ability to support millions of pilgrims with reliable, high-quality connectivity, even during the busiest periods of the year. ■

## Character, Care, and Resilience

# The UAE's Digital Sector Remains the Conduit of New Opportunities



Izhar Ahmad

with conviction, consistency, and care; all the right pillars that support the conduit of opportunities the nation is known for.

The philosophy behind the UAE's investment culture is not purely commercial either. When the country's leadership speaks about what the UAE is, the language is consistently one of collective belonging; one that all here share, feel, live, and work for. Regardless of origin, everyone is a part of what is being built here. HH President of the UAE has recently expressed this directly, noting that in the UAE, everyone is Emirati through their love for this land and their contributions to it. This is not diplomatic jargon. This is a profound expression of a nation's character and its governing philosophy. It offers an insight into how

and Digital Government Regulatory Authority, the TDRA, has been central to the UAE's digital capability, prowess, and security, now increasingly augmented by the strategic oversight of the UAE Cybersecurity Council. What the TDRA has done well over the years goes beyond the traditional functions of spectrum management, licensing, or consumer protection, for instance. It has extended its remit into broader digital governance and, more critically, has maintained regulatory consistency over time. This consistency has reduced uncertainty for operators and investors alike, shortened deployment cycles for new technologies, and aligned compliance requirements with national priorities rather than allowing fragmentation across sectors. Even the upcoming discussion planned by the TDRA

In markets where critical infrastructure lacks redundancy and policy lacks consistency, periods of geopolitical tensions expose structural weaknesses. In the case of the United Arab Emirates, neither of those conditions applies. Observably, at the core of the country's belief system is a clear recognition that telecommunications and digital infrastructure are the operational backbone that must be resilient, and that infrastructure performance is a measurable determinant of national stability even when there is some instability on international fronts.

Resilience, in the UAE ICT context, is thus not about the ability to bounce back. It is about care for citizens and the structural capacity to action a vision, remain relevant, funded, and in demand regardless of what the region around it is experiencing. It is less a defensive quality and more the natural outcome of doing things right over a long period of time. The foundation on which the country and its ICT sector rest is built

### *What the TDRA has done well over the years goes beyond the traditional functions of spectrum management, licensing, or consumer protection*

infrastructure decisions get made here in the UAE for everyone, with continuity for everyone in mind. Moreover, when the President's Eid message arrived on every handset in the country, delivered through the e& and du networks, it was a quiet illustration of something larger: The connectivity infrastructure connecting this country is treated as an instrument that weaves the national life here for those who call it home. This is a reaffirmation that the country has built and effectively utilizes its "infrastructure of care".

#### **A System Built to Deliver**

The role of the Telecommunications

in collaboration with the GSMA and the SAMENA Council on 6 GHz spectrum harmonization and utilization plans around the region speaks of the UAE's focus on countering fragmentation and fostering clarity and consistency; two key elements that demonstrate care. Care in the sense that it is not a sentiment, but an ongoing pursuit of clarity in function, sustainability in operation, and consistency in delivering on investor and citizen expectations.

The TDRA's ongoing international engagements reinforce this credibility. The UAE hosted WRC-23 in Dubai in November 2023, welcoming over 4,000 delegates from 193 countries, and has consistently held



similar host and leadership positions within the ITU's global activities and processes as well as regional policy coordination bodies, such as the Arab Spectrum Management Group. At UNGA 2025, the Authority's Director General delivered a powerful message addressing the global issue of developmental divide while presenting the UAE not as a regional player seeking recognition, but as a working model of what deliberate, principled digital transformation looks like at scale.

The recent pandemic period was the first real stress test of the UAE's digital infrastructure at scale. The systems held. The platforms already in place absorbed a sudden and dramatic shift to remote work, remote government services, and remote commerce without meaningful failure. That experience was formative, not just operationally but psychologically, across both the public and private sectors. The current period of regional tension represents a different kind of test, one that shifts the requirement from scaling demand to ensuring continuity under uncertainty; a key principle on which the SAMENA Council, after consulting with the TDRA leadership,

### *The opportunities now lie in the layer above: the applications, the platforms, and the sector-specific solutions that can utilize this world-class infrastructure for delivering new services, not just for the UAE but beyond.*

decided to hold the Leaders' Summit 2026 despite the perceived challenges.

There is another dimension to this that we may not account for in the ICT sector analysis. Faced with direct security threats, the sovereign state has responded without hesitation and without regard to cost, because the calculations and those "interceptions" were not financial. They were moral, driven by care for the well-being of every citizen, and a conviction that the safety and continuity of life for everyone inside the UAE is non-negotiable. That same logic drives the UAE's approach to digital infrastructure investment: Redundancy may be expensive, but continuity is non-negotiable. The mindset is consistent whether the context is national security or network resilience.

Both of these scenarios illustrate how countries that build their systems in citizen interest and to deliver rather than to impress are rewarded with faith, trust in the leadership, and the "Emirati spirit".

#### **Where Opportunities Now Lie**

The question for industry stakeholders and decision-makers to now consider is not whether to invest in the UAE ICT sector. It is what to build on top of what already exists. A world-class fixed-line and mobile infrastructure, a thriving 5G/5G-Advanced ecosystem, with 6G under preparation, a rapidly expanding base of data centers, cloud platforms, and AI capabilities, and a stable regulatory environment continually supported by clarity and agility, and numerous other factors are all firmly in play.

The opportunities now lie in the layer above: the applications, the platforms, and the sector-specific solutions that can utilize this world-class infrastructure for delivering new services, not just for the UAE but beyond.

The UAE's digital sector is a key pillar of support for its broader economic agenda, where national economic diversification is a key priority. Thinking in current, increasingly artificial-intelligence contexts, we see that AI-assisted logistics are making trade corridors more efficient and more competitive; digital financial services are reaching populations and business segments that traditional banking has hesitated to serve; precision agriculture is already being piloted in desert conditions; and smart energy management systems are extending the productive life of existing infrastructure while simultaneously building the data layer that the non-oil economy runs on. Visual data intelligence leveraging machine vision technology is also deployed.

**The UAE's digital sector is a key pillar of support for its broader economic agenda, where national economic diversification is a key priority**

These are active programs, and they represent entry points for operators and investors who understand that the UAE's digital transformation agenda has sovereign backing, long timelines, and a strong socio-political will and support.

Such support extends especially to the AI dimension. The UAE's position is not simply that it is investing in AI. In fact, the country has committed over US\$14.7 billion into artificial intelligence since the start of 2024. What this actually means is that it is well-positioned to deploy AI at scale for populations that currently have almost no access to frontier AI capability.

Across South Asia, the Middle East, and East Africa, within a 4,000-kilometer radius of the UAE lies a market of more than 2 billion people. This is significant and, arguably, can

be considered as one of the world's largest markets where development divides exist and which may also be the world's largest underserved AI market. These regions have mobile connectivity. They have growing digital economies, and even 5G is either present or is starting, as in Pakistan. What several of these countries lack is trusted and secure compute infrastructure, sustainable governance frameworks, and a neutral platform from which AI services can be delivered to them at scale. The UAE can create and offer this foundation to markets within its strategic as well as physical reach.

Leveraging its AI strategy, connectivity infrastructure, digital capabilities, and international relations, the UAE has the capacity and the prowess to become the region's data embassy, a neutral, sovereign, and trusted computational ground for governments, enterprises, and developers across some of the fastest-growing digital economies in the world. While Estonia

pioneered the data embassy concept first almost a decade ago and has demonstrated that a country's critical data and digital infrastructure can reside physically in another jurisdiction while remaining legally and sovereignly tied to the home country, the UAE is in a position to exercise prescience in this direction as well to take the concept to a new depth: The UAE is a well-governed computational ground on which the broader region's digital economy can run. The international confidence-building experience gained over the years, whether materialized through hosting world-class industry conferences or through providing the best in class infrastructure, expertise in governance frameworks, and the nationally developed ability to offer governments and enterprises from markets with complicated geopolitical alignments the capability to route sensitive workloads through it, are key

strengths that can be leveraged here in both national and regional interest.

The underlying story of the UAE digital sector is simple: Geographically a small country, holding the right vision and making the right policy and investment decisions early, attracted long-term capital of a quality and scale that few markets in the region, or the world, have seen, and demonstrated a policy vision and created a regulatory environment that the private sector continues to believe is among the most conducive in the world for serious infrastructure commitment and for new opportunities.

So far, the year 2026 is continuing with its challenges. However, the challenges have a formidable contender: the Emirates' resilience, which in the discussed context is the outcome of cumulative system-building and a mindset that fosters and executes engagement, care, and responsibility with character. For those reading this as operators, investors, regulators, or policymakers, this is not an argument to look away from the risks in the air. It is an invitation to look at the full picture. The infrastructure is built. The compute is alive. The demand is structural and non-discretionary. Heavy AI investments are underway. The AI market within reach is perhaps the largest underserved one on earth. And the country sitting at the center of all of it has demonstrated, under real pressures, that it does not flinch and, in the words of its President, will "emerge stronger than before".

The UAE is a market that is open, functioning, and actively shaping the digital decade ahead. The consideration for anyone with a stake in this region's digital future is not whether to engage. It is whether they can afford to be absent from where new engagement opportunities will arise. ■

*The author is a key contributor to the work of the SAMENA Telecommunications Council in support of the needs of the private sector as well as achievements of the government sector. An engineer by education, he is an inducted member of the IEEE-Eta Kappa Nu.*



MTN Group has announced operational and financial results for 2025, delivering significantly on our Ambition 2025 strategy and transitioning to Ambition 2030 priorities to capture value from the attractive structural growth opportunities brought about by accelerated data adoption and financial inclusion across Africa.

We reported very strong commercial outcomes led by MTN Nigeria and MTN Ghana; a resilient performance from MTN South Africa; robust free cash flow; improved return generation; and a 45% jump in the dividend.

We also unveiled an enhanced shareholder remuneration framework, including a R6 billion share buyback programme, and re-affirmed our medium-term guidance, updating our return and leverage metrics.

"The Group's overall performance in 2025 was excellent. In the final year of our Ambition 2025 strategy, we were proud to have exceeded the 300 million customers milestone in line with our priority to deepen digital and financial inclusion," said MTN Group President and CEO Ralph Mupita.



*Ralph Mupita  
President and CEO, MTN Group*

At 31 December 2025 across 16 markets, we served more than 307 million voice, 172 million data and 70 million Mobile Money customers. Increases were supported by diligent commercial execution as well as sustained investment of R38 billion to enhance the capacity, coverage and quality of

our networks and platforms. MTN's data traffic accelerated by 27%, with average monthly data use per customer up at 12.5GB from 10.8GB. We continued to scale our fintech platform, growing the ecosystem and benefiting from greater customer take-

up of more advanced services. This supported a 15% increase in the volume of transactions to more than 23 billion in the year, with total transaction value topping US\$500 billion.

In line with our commitment to create shared value, we contributed approximately R150 billion in economic and social value across Africa; expanded broadband coverage to more than 94% of the population; and cut the cost of data to communicate for customers by an average 14%. Our work with communities, nation states and other stakeholders led to the achievement of our strongest reputation and trust scores since the launch of our Reputation Index Survey in 2019.

Underpinned by improved macroeconomic conditions, the Group increased service revenue by nearly a quarter to R218 billion. In constant-currency terms MTN Nigeria and MTN Ghana – which announced results in late

February – lifted service revenue by 54.9% and 35.9% respectively. MTN SA increased service revenue by 2.0%, demonstrating operational resilience and sustained commercial momentum as it navigated the challenges of a mature and competitive market.

At R98.5 billion, earnings before interest, tax and amortisation (before once-off items) were up by more than a third in constant currency. This was supported by expense efficiencies of R3.6 billion in the year. Basic earnings per share (EPS) swung from a loss in 2024, to a profit in 2025 and adjusted headline EPS increased by 67%.

With a sustained healthy financial position and balance sheet flexibility, MTN declared a dividend of 500 cents per share from 345 cents in 2024, comfortably outstripping the minimum 370 cents the Board of Directors had anticipated.

The Group also announced an evolution of strategy, unveiling *Ambition 2030*, which streamlines our execution approach into three principal platforms of choice for consumers, homes and businesses: Connectivity; Fintech; and Digital Infrastructure. Through the strategy, we are energised to provide the leading customer experience, leveraging AI for growth and creating shared value.

While remaining vigilant to evolving risks in global geopolitics, Mupita said *Ambition 2030* embodied the right framework to sustain MTN's medium-term growth and value-creation journey: "We are hugely excited about Africa's potential and are well positioned to leverage our scale, footprint and brand leadership to capture the significant structural growth opportunities identified. We are committed to accelerate our impact and empower the people, businesses and nation states we serve." ■

## Cassava Technologies launches Cassava Autonomous Network, powered by NVIDIA to redefine network performance in Africa

Cassava Technologies has announced the launch of Cassava Autonomous Network, an agentic solution designed to significantly improve network performance across Africa. This solution is the first African-ready, autonomous network designed to self-optimize mobile Radio Access Networks (RAN) and built specifically for the unique complexities of Africa's connectivity landscape.

Powered by NVIDIA AI infrastructure, NVIDIA NIM microservices and NVIDIA Network Configuration Blueprint, Cassava Autonomous Network offers policy-driven automation that replaces manual network adjustments with continuous, intelligent optimisations, reducing operational bottlenecks and increasing efficiency by up to 75%. Cassava Autonomous Network runs on CAIMEx, a localised multi-model platform that provides unified access to leading AI models through regional AI factories.



African telecom operators currently manage increasingly dense and complex networks under tight resource constraints. While 4G remains dominant in Africa (GSMA 2024 report), 5G continues to scale, meaning daily optimisation remains a manual bottleneck. Cassava Autonomous

Network eliminates these inefficiencies by automating the process and reducing repair time for minor issues from four days to approximately 35 minutes. The solution is also designed to work across all vendors and network generations (2G, 3G, 4G, and 5G), including legacy, hybrid, and cloud-native deployments.

With the launch of Cassava Autonomous Networks, the company has yet again reiterated its commitment to empowering businesses through digital solutions. "In today's multi-vendor landscape, flexibility is the ultimate currency. Cassava Autonomous Networks provides a truly open architecture that respects existing RAN investments while introducing advanced agentic AI capabilities. Our solution allows telco operators to supercharge their hardware systems," said Ahmed El Beheiry, Group COO and Group Chief Technology & AI Officer, Cassava Technologies. ■



By Sridhar Gollapudi & Mikko Jarva

The telecommunications industry is entering its most significant shift yet: the agentic era. We're moving beyond siloed automation tools toward a fully agentic ecosystem that can automate entire workflows.

At Mobile World Congress (MWC) Barcelona, we're announcing the integration of Nokia's Network as Code (NaC) platform with Google Cloud's optimized agentic AI stack, to transform from network APIs into a fully agentic ecosystem. This delivers AI agents to telecommunications companies that can autonomously observe, program, and optimize the network through natural language and goal-oriented task automation.

### The three pillars of the AI-network evolution

To meet the demands of the agentic era, the relationship between AI and the network is shifting from a "connected" model to a "deeply integrated" one. This evolution is unfolding across three distinct fronts:

- **The autonomous network:** The network is transitioning from a manually managed



Sridhar Gollapudi, Head of Telco Industry Solutions, Google Cloud at Google

utility to an autonomously orchestrated system with AI embedded directly into its control and data planes. By integrating intelligence into every phase—from initial build-out and planning to real-time fault detection and root cause analysis—the network becomes a self-healing fabric. This transition prepares the infrastructure for the programmable, high-fidelity data needs of the agentic era, ensuring that the network can anticipate and scale for demand before it impacts the enterprise.

- **Networks optimized for AI:** As AI agents take on the "digital chores" of our lives,



Mikko Jarva, Head of Portfolio and Architecture for Nokia's NMP business unit

networks must be architected for heavy uplink data and low-latency "time-to-first-token" requirements. To make technology feel like magic rather than work, mobile networks must become hyper-dynamic, proactively negotiating with the nearest compute nodes like Google Distributed Cloud (GDC) to process tasks at the edge. This localized orchestration manages traffic and compute latency in the background, ensuring that AI assistants respond instantly without the user ever noticing a lag.

- **AI agents programming the network:** While programmable networks have long

promised to unlock value for enterprises and telcos, agentic AI is the catalyst that finally makes this accessible by transforming the developer experience. By exposing capabilities from the RAN to the core through a unified API framework, AI agents can now translate natural language prompts into complex, intent-driven network configurations. This shift enables autonomous systems to coordinate tasks and exchange data between agents, allowing the network to dynamically adapt to the specific needs of an application in real-time.

Nokia's Network as Code platform — now connecting over 70 partners and 20+ network APIs — is becoming agent-enabled through integration with Gemini models and Google Cloud's agentic framework. By leveraging standardized interaction protocols like A2A and MCP, these specialized agents move beyond simple automation to active reasoning—allowing them to interpret intent and manage complex network tasks autonomously.

**The technical bridge: how Nokia and Google Cloud integrate**

The shift from simple APIs to network AI agents is powered by a three-layer integration that connects Google Cloud's intelligence to Nokia's network expertise:

- **The exposure layer (Nokia Network as Code):** This platform abstracts complex 5G core and RAN functions into standardized, Northbound APIs (CAMARA/GSMA Open Gateway). By accessing these Nokia APIs via Google Cloud Marketplace, developers can tap into global mobile networks and utilize the Network as Code portal to gain standardized access to network functions without the need to navigate underlying technologies.

- **The intelligence layer (Gemini with Network as Code):** We are using Gemini to move from "calls" to "intents." Using MCP, Network as Code AI agents can autonomously identify and utilize network tools such as Quality of Service (QoS) or location verification to achieve specific business goals.

- **The interaction layer (agent-to-agent):** Through the A2A protocol, a business's agent (e.g., a logistics coordinator) can communicate a goal to a network agent. The network agent then translates that goal into network-specific instructions, orchestrating the network in real-time without manual coding.

**Extensibility via the Agent Development Kit (ADK)**

To enable a truly bespoke enterprise ecosystem, organizations can use the ADK to extend these capabilities. The ADK allows developers to build and deploy custom multi-agent systems that integrate proprietary business logic with Nokia's network intelligence. This modularity ensures that specialized business agents can autonomously negotiate network resources to meet unique mission requirements, securely bridging the gap between internal enterprise data and external network capabilities.

**From programmable network to intent-driven enterprise**

The true power of this integration lies in how it bridges the "API gap." While Network as Code provides the essential programmable foundation, the addition of Agentic AI allows for a zero-code user experience. Developers no longer need to master low-level telco protocols; they simply define the business intent, and the agentic framework handles the underlying code execution.

**The agent-enabled enterprise in action**

By sensing real-time conditions—like a drop in mission-critical connectivity—the agentic ecosystem can autonomously resolve issues or provision resources before a service is impacted:

- **Autonomous logistics:** A fleet management agent can request optimized connectivity for a future drone mission. The Network as Code agent automatically ensures coverage, quality, and priority throughout the flight path.

- **Enhanced security:** An enterprise device management agent can ask a Network as Code agent to flag any customer subscription, device, or location anomalies in real-time, instantly hardening the security posture of mobile assets.

- **High-precision monitoring:** A security agent can request a dedicated network slice to support multi-modal AI inference from mobile device feeds, ensuring the bandwidth is there exactly when the data starts flowing.

**Why this matters for the telco ecosystem**

This partnership bridges the gap between the complex world of network standards and the fast-moving world of cloud developers. For telco providers, it provides a clear path to transform the network from a cost center into an innovation engine. By making network capabilities discoverable and actionable within the Google Cloud Marketplace, telcos can finally monetize their 5G investments at scale.

"The network is no longer a bottleneck or a black box — it is a programmable, intelligent partner in our AI journey. With an intuitive intent-driven interface built into Nokia's Network as Code, developing and deploying innovative services that leverage the network intelligence is possible at a much quicker pace, reducing time-to-revenue significantly," said Vladimir Liulka, CEO, Blocksport.

"Unlocking a seamless, intuitive developer experience is critical to the growth of monetizable services that leverage the full power of programmable networks and network APIs. Agentic AI framework, with agents providing the developer interface, provides the critical infrastructure to enable this experience. Nokia's Network as Code platform, which is already integrated with Deutsche Telekom Network APIs, is a pioneer in enabling the transformation for programmable networks to the agentic world," said Dr. Chathurangi Wickramasinghe, Senior Vice President, Magenta Business API, Deutsche Telekom. ■

# Pakistan enters 5G era

## PTA concludes landmark spectrum auction



The Pakistan Telecommunication Authority (PTA) has successfully concluded the allocation stage of the landmark Next Generation Mobile Services (NGMS) / 5G Spectrum Auction, marking a major step toward the rollout of 5G services in Pakistan.

Three qualified operators—Jazz, Ufone, and Zong—participated in the auction, which offered 597.2 MHz of spectrum across six frequency bands: 700, 1800, 2100, 2300, 2600, and 3500 MHz.

The auction was conducted through a secure Electronic Auction System (EAS), with PTA's control room established at its headquarters in Islamabad.

The process was managed by PTA in collaboration with international consultant NERA Economic Consulting. Operators participated remotely, while the results of each round were publicly announced in the presence of print and electronic media, published on PTA's website, and broadcast live on Pakistan Television to ensure transparency.

During the allocation stage, a total of 480

MHz of spectrum was sold. Jazz secured 190 MHz, Ufone 180 MHz, and Zong 110 MHz across different bands. The allocation stage concluded after three rounds of bidding.

PTA has also successfully concluded the Assignment Stage of the Next Generation Mobile Services (NGMS) / 5G Spectrum Auction, marking another key milestone toward the rollout of 5G services in Pakistan.

During the Assignment Stage, the specific frequency positions within the auctioned spectrum bands were finalized to enable efficient network planning and deployment by participating operators.

In the 2600 MHz band, Jazz secured 70 MHz, while Zong and Ufone obtained 60 MHz each. In the 3500 MHz band, Ufone secured 120 MHz, while Jazz and Zong acquired 50 MHz each, with 60 MHz remaining unsold.

The auction generated a total of US \$509.6 million (approximately PKR 142.6 billion) for the national exchequer. Jazz secured spectrum worth US \$239.38 million, Ufone

US \$156.75 million and Zong US \$113.47 million

With the completion of the assignment stage, operators can now proceed with network planning and deployment, paving the way for the gradual rollout of 5G services in Pakistan.

The auction ceremony was attended by Attaullah Tarar, Federal Minister for Information and Broadcasting, and Shaza Fatima Khawaja, Minister for IT & Telecom.

The ministers commended PTA for conducting a fair, transparent, and efficient auction, as directed by the Prime Minister, describing it as a significant step toward Pakistan's digital transformation.

Representatives of the participating operators also appreciated the transparent process and PTA's collaborative approach.

The auction is expected to accelerate Pakistan's digital economy, enhance mobile broadband quality, and pave the way for nationwide next-generation 5G services. ■

# Pakistan's spectrum auction: Widening the digital highway

by Robert Wyrzykowski, Principal Analyst at Opensignal, APAC

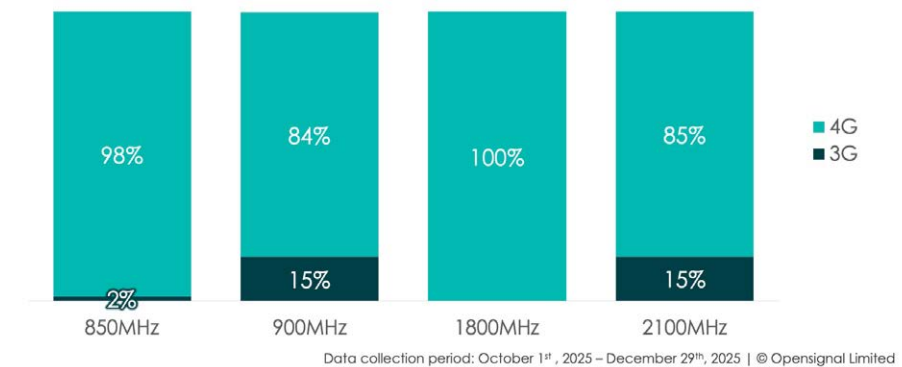
Imagine trying to squeeze eight lanes of rush-hour traffic into a two-lane alleyway. That is the daily reality for Pakistan's 240 million inhabitants, as described by the IT Minister Shaza Fatima Khawaja. While the appetite for data is rising, the limited spectrum dedicated to mobile services has historically created a "digital bottleneck". This has resulted in congestion, slow speeds — averaging below the 20 Mbps mark — and frequent disruptions. In Opensignal's Global Network Excellence Index for Q4 2025, Pakistan lags behind its peers in South Asia, ranking 5th for Download Speed and 6th for Excellent Consistent Quality out of six markets in the region.

But this reality is finally shifting. In March 2026, Pakistan concluded its most significant spectrum auction to date, with three major operators — Jazz, Zong, and Ufone — investing US\$510 million in total to secure 480 MHz of spectrum (out of 600 MHz offered). This marks a near-tripling of the total spectrum assigned to mobile operators, expanding it from 274 MHz to over 750 MHz.

With a clear push toward modernization, the Pakistan Telecommunication Authority (PTA) has made bidding in the 2.6 GHz and 3.5 GHz bands mandatory for all qualified participants. These are two foundational mid-band frequencies powering 5G deployments across Europe, MENA and APAC.

However, the PTA's primary objective was not immediate fiscal revenue. In fact, the relative price of the spectrum sold was fairly low, sitting at \$0.004/MHz/Pop — significantly lower than recent auctions in Sri Lanka and Bangladesh. This indicates a deliberate regulatory shift — the PTA is prioritizing rapid infrastructure transformation over short-term treasury gains. And this shows in some of the auction's obligations:

Before the spectrum auction, Pakistan was using only four spectrum bands, mainly for 4G



- **Speedy launch:** Commercial 5G services must go live within 3 – 6 months of the auction's conclusion.

- **Coverage expansion:** Operators must deploy 1,000 new sites annually, with at least 200 targeting existing coverage gaps in underserved areas.

- **Quality of Service (QoS):** The PTA is introducing increasingly stringent benchmarks for latency and download/upload throughput — for example the requirement for median 4G download speed will increase from 20 Mbps to 50 Mbps by 2030–35.

To ease the transition, the government has introduced key facilitations, including greater flexibility in spectrum sharing, a one-year payment holiday on spectrum fees and abolishment of right-of-way (RoW) charges, reducing them from PKR36,000 (US\$128.85) per kilometre. This allows operators to redirect capital toward physical infrastructure and fiber deployment rather than upfront licensing costs.

### 4G-first: the pragmatic road to 5G

While headlines about 5G's arrival in Pakistan dominate the news, both the PTA

and local operators are playing a more nuanced game: prioritizing a "4G-first" transition. This strategy acknowledges a fundamental technical reality — initial 5G deployments will almost exclusively utilize Non-Standalone (NSA) architecture. Because NSA 5G anchors itself to the existing 4G core and signaling, the next generation cannot actually function without a robust, uncongested 4G foundation.

While it would rely on the 4G core at first, 5G is far more than a simple "add-on"; it brings significantly higher spectral efficiency, allowing operators to pack more data into the same amount of airwaves. This is vital for a market as price-sensitive as Pakistan, where the cost-per-bit must remain low to keep services accessible. Despite this efficiency gain, device affordability remains the primary structural constraint. In a region where the average consumer is highly budget-conscious, the transition hinges on the mass availability of affordable devices. While local 5G smartphone manufacturing has crossed the 500,000-unit mark, this remains a drop in the ocean for a nation of 240 million.

But even with the right devices and the right amount of spectrum, the "pipes" behind the towers must be upgraded. Expanding

fiber backhaul is the final piece of the puzzle; as of early 2026, only about 18% of Pakistan's mobile sites are fiber-connected, making the Ministry of IT's 80% target for 2029 the true benchmark for a digital "quick fix." Without fiber densification, additional spectrum risks delivering theoretical capacity rather than real-world performance gains.

### The regional context: not just a race

Pakistan's auction marks the third major spectrum tender in South Asia in the past three months. Sri Lanka concluded its 5G spectrum auction in December and has already launched commercial 5G services. Meanwhile, in January 2026, Grameenphone emerged as the sole bidder in Bangladesh's 700 MHz spectrum auction, as Bangladesh launched its 5G services back

in September 2025. However, Pakistan is not simply joining a regional race — it is building the eight-lane highway its citizens deserve, as the PTA has cleared the path for a new era of connectivity. While regional peers like Sri Lanka and Bangladesh have moved into the 5G era slightly earlier, their starting positions were fundamentally different.

- Sri Lanka has historically assigned more spectrum to mobile services. The December 2025 auction added 200MHz in the 3.5GHz band to the already existing 4G footprint. This allowed for an immediate transition to commercial 5G services within the same month.

- Bangladesh assigned 190 MHz of 2.3 GHz and 2.6 GHz spectrum as early as March 2022. However, commercial 5G

services did not happen until September 2025, largely due to high spectrum pricing and a slow maturation of the 5G handset market. The January 2026 auction of the 700 MHz band further highlights a market where regulatory costs have occasionally dampened competitive intensity.

In contrast, Pakistan entered 2026 with less spectrum than its peers but with a solid plan for action. The release of 480 MHz in this auction is a critical expansion of the country's digital capacity. The PTA launched the auction with affordable spectrum prices, significant structural reforms, and facilitations to ensure that spectrum acquisition translates into speedy site and fiber densifications. As these capacity bottlenecks ease, Pakistan's digital infrastructure is finally scaling to match its massive market potential. ■

## VEON partners with GSMA Foundation to accelerate innovation in Pakistan and Bangladesh

VEON announces a partnership with the GSMA's Mobile for Development Foundation ("GSMA Foundation") to co-fund digital innovation projects in Pakistan and Bangladesh that are supported by the GSMA Innovation Fund.

John Guisti, Chief Regulatory Officer of the GSMA and President of the GSMA Foundation, Aamir Ibrahim, CEO of JazzWorld, and Johan Buse, CEO of Banglalink, have launched the partnership with a Memorandum of Understanding (MoU) signed in Barcelona during MWC2026.

Under the terms of the MoU, JazzWorld and Banglalink will collaborate with the GSMA Innovation Fund to co-fund the Pakistani and Bangladeshi start-ups selected as grantees in the GSMA Innovation Fund's 2026 funding rounds. In addition to financial support, VEON and its operating companies may also provide in-kind contributions including ecosystem visibility and capacity building support to help selected projects scale.

"Jazz and Banglalink, both part of VEON



Group, play a leading role in shaping the digital landscape in Pakistan and Bangladesh. Collaborating with them will further enhance the support of the GSMA Innovation Fund for entrepreneurs driving positive social impact in these two countries" John Guisti, Chief Regulatory Officer, GSMA and President of the GSMA Foundation.

"JazzWorld has a strong track record of working with the Pakistan's entrepreneurs to accelerate digital innovation in Pakistan. We look forward to collaborating further with the GSMA Foundation to support the next generation of entrepreneurs

who are building locally-relevant digital solutions that generate growth for Pakistani communities across various service verticals," said Aamir Ibrahim, CEO, JazzWorld.

"Making digital services accessible and helping our customers, partners and ecosystem build a better life is the purpose that drives us at Banglalink. Our partnership with the GSMA Innovation Fund allows us to extend this mission further to Bangladeshi entrepreneurs at time when Bangladesh is rebuilding the foundations of its growth - and we look forward to the opportunity," said Johan Buse, CEO, Banglalink. ■

## Recap of satellite discussion at Mobile World Congress Barcelona 2026

### Will LEO Satellite Direct-to-Cellular Networks Make Traditional Mobile Networks Obsolete?

Myths proliferate about how satellites will affect competition in the telecom, mobile, fixed broadband and cable TV market. Strand Consult examines this in the report “Will LEO Satellite Direct-to-Cellular Networks Make Traditional Mobile Networks Obsolete?” cuts through the hype and separates fact from fiction.

This note summarizes the key takeaways on satellites, Starlink, and the future of connectivity—highlighting why LEO systems will expand options for consumers and industries, but does not necessarily replace terrestrial networks. Notably Starlink has been able to grow through spectrum and regulatory opportunism, building a global footprint without acquiring spectrum rights or complying with regulatory obligations in some cases. Its service is active in 150+ countries, making it a quasi-global carrier with unmatched reach. This is destabilizing particularly for small countries and small providers which cohere to regulatory conventions and local laws. Overall, satellites are on track to expand connectivity overall, not replace the major terrestrial networks.

#### Recap of Satellite Discussion at Mobile World Congress

At Mobile World Congress in Barcelona, satellite-enabled connectivity featured prominently across multiple sessions. Keynote 2, “Transforming Tomorrow’s Connected World,” highlighted how connectivity is expanding from traditional networks to cloud platforms and now into space, underscoring how cloud and satellite markets will reshape the telecom ecosystem.

During the keynote, SpaceX COO Gwynne Shotwell and Starlink SVP Michael Nicolls emphasized how far ahead Starlink is compared to competitors. The numbers

bear this out: Starlink grew from 4 million customers in September 2024 to roughly 11 million by MWC, supported by approximately 9,800 satellites—around 70% of all satellites currently in orbit—serving 155 countries. Revenue has surged to \$12 billion in just a few years. By contrast, French operator Eutelsat reported €1,244 million (\$1,467 million) in 2024/25 revenue, with only €187 million (\$220 million) coming from its LEO business (OneWeb). My prior observation that Elon Musk runs an “interstellar McDonald’s” while rivals run burger bars now seems generous—today, Starlink’s competitors look more like hot dog stands.

Starlink’s roadmap is equally aggressive. In the U.S., it already provides direct-to-device (D2D) service using 10 MHz of paired spectrum on T-Mobile’s PCS G-block (1910–1915/1990–1995 MHz). With its planned \$17 billion acquisition of EchoStar’s AWS-4 and AWS-3 spectrum, Starlink aims to scale 5G-enabled D2D services further, deploying up to 15,000 next-generation satellites beginning in 2027.

Keynote 4, “What Does Strategic Tech Sovereignty Mean for Europe,” featured Eutelsat CEO Jean-François Fallacher, who argued Europe needs a sovereign Starlink alternative. The ambition is understandable, but the economics are unforgiving: Starlink operates more than 9,700 satellites and generated \$12 billion last year, while Eutelsat operates just 634 satellites and its OneWeb LEO revenue was €187 million (\$220 million). The gap continues to widen, reinforcing a “winner-takes-most” LEO market.

Separately at the Morgan Stanley Technology, Media & Telecom Conference 2026, Verizon CEO Dan Schulman acknowledged that satellite-based communications offer “real value add,” but

also noted significant remaining hurdles—handset compatibility, seamless switching, and consistent service quality. “Right now, terrestrial ... is the best connectivity and speed ... far and away,” he said, emphasizing Verizon’s disciplined approach to ecosystem design.

#### Challenges for Broadband Providers

The central question is how the business model evolves when satellite-enabled services begin competing with mobile, fixed broadband, and cable TV. Let’s examine this technology segment by segment.

#### Mobile

Satellites can now connect directly to smartphones without a dish or special handset. This direct-to-device (D2D) capability eliminates dead zones, enhances disaster resilience, and provides valuable redundancy. In the United Kingdom, O2 customers can add a D2D supplement for £3 (\$4) per month. That pricing point is important. Mobile operators note that customers in areas with poor coverage may be willing to pay a small fee for satellite reach, but it remains unclear how many will actually subscribe, what the subscriber acquisition cost (SAC) will be, how churn will behave, and whether a sustainable business case exists. Strand Consult doubts the economics will hold and expects D2D to ultimately become a free, fair-use backup service bundled by mobile operators.

#### Fixed broadband

Strand Consult recommends assessing this market across multiple dimensions, including Starlink’s pricing structure. Starlink competes with DSL, fiber, and coaxial providers, each offering different speeds and price points. For some customers, Starlink represents a viable

technical and economic alternative; for others, it does not. Strand Consult expects Starlink to focus first on rural broadband providers in the near term, with different dynamics emerging over the longer horizon.

#### Fixed Wireless Access (FWA)

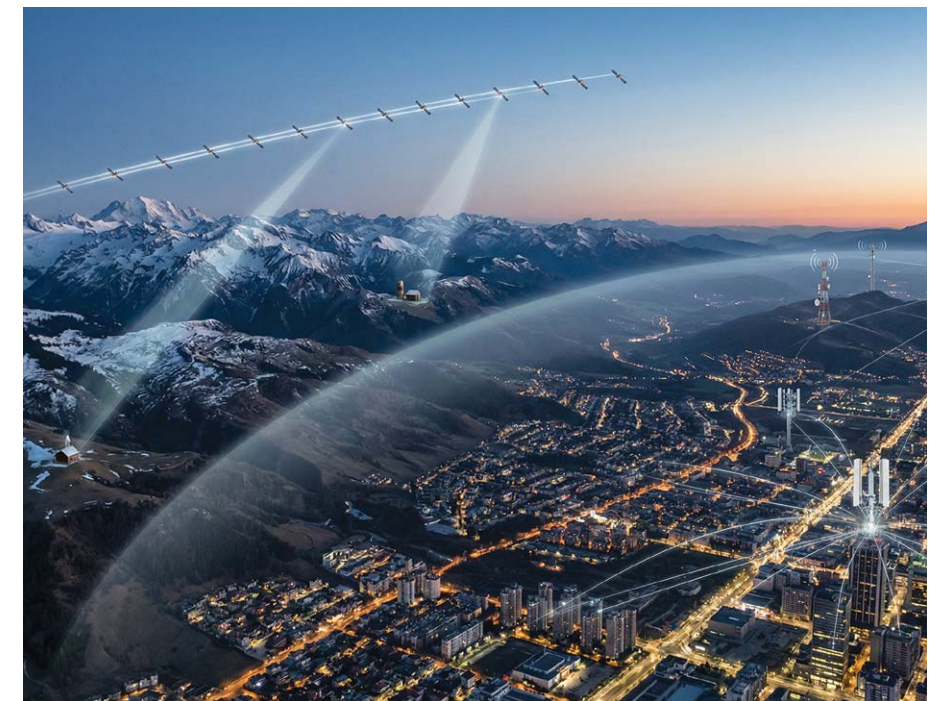
For mobile operators and smaller broadband providers offering FWA, Strand Consult believes Starlink poses an even stronger competitive challenge, as many customers already accept broadband delivered through non-fixed solutions.

Overall, Starlink is a fast-moving competitor that initially targets niche or underserved segments but is likely to expand its relevance over time. The firm argues that the key barrier is not technological but psychological: customers must first understand when Starlink is a suitable alternative and when it is not. This mental barrier is eroding as more households shift from fixed broadband to FWA.

For more than 15 years, Strand Consult has argued against the assumption that fiber networks constitute a monopoly capable of sustaining higher prices. 5G and FWA exert strong downward price pressure on fixed broadband. Denmark illustrates this trend: although 99.1% of homes had access to high-speed internet (fiber and coax) in 2025, the share of households using fixed broadband declined by five percentage points from 2024 to 2025—and again the following year. As in the transition from landlines to mobile phones, Danish households increasingly abandon fixed broadband in favor of mobile broadband as their primary home connection.

#### Defense & First Responders —The Revenue Opportunity

NATO countries are modernizing their defense systems, driving massive investment in advanced equipment. While the procurement lists are long, every new defense solution shares a common requirement: access to modern, secure communications. For years, the telecommunications industry has



discussed new revenue streams for mobile operators—particularly through 5G and private 5G networks—but far less attention has been given to the communications needs of future defense systems.

A significant underexplored growth opportunity for mobile operators lies in using 5G as the backbone for first responders, military communications, and critical infrastructure. Proven models already exist: the U.S. FirstNet serves 8 million users with a \$40 ARPU; Norway is migrating 150,000 emergency users to 5G; the UK is advancing its Emergency Services Network; and the Nordic region is pioneering cross-border 5G military slicing. These are real, monetizable markets. However, expanding them requires confronting uncomfortable issues—trusted versus untrusted vendors, high-risk suppliers, and Europe’s dependence on Chinese equipment—topics that are politically sensitive.

2026 may mark a true turning point, with mobile networks beginning to assume functions historically handled by dedicated defense or public-safety systems. Secure connectivity for first responders is now a central policy issue. Where defense

communications once operated in silos, modern 5G standards have become robust and secure enough to support mission-critical functions on commercial infrastructure. Some countries are layering 5G onto existing TETRA systems, while others are evaluating full transitions to mobile-based networks.

The boundary between civilian and defense networks is rapidly disappearing. Militaries are no longer building bespoke, isolated systems; instead, they are procuring best-in-class commercial solutions and integrating them into their operational environments. Even consumer devices are entering the defense ecosystem: Germany’s security authority recently approved iPhone and iPad for NATO-classified communications, allowing them to handle information up to NATO Restricted without special software—a certification no other consumer device has achieved.

The business model is already validated. In the United States, AT&T’s FirstNet—supported by 20 MHz of prime spectrum and \$7 billion in public funding—serves 8 million first responders at roughly \$40 ARPU. And AT&T faces competition: Verizon offers Frontline, and T-Mobile

introduced T-Priority in 2025. Norway is moving 150,000 emergency users from a state-owned TETRA network to commercial 5G by 2031, and Nordic countries are deploying cross-border 5G military slicing. Defense ministries are no longer building isolated systems—they are buying capacity from commercial operators. The Norwegian Armed Forces, for example, purchase capacity from Telenor and ICE, combining mobile and fixed-network expertise with partners such as Finland's Altibox and Nokia.

In the UK, the Home Office is leading a cross-government initiative to deploy the new Emergency Services Network (ESN), which will replace the Airwave system. ESN will provide fast, secure voice, video, and data over 4G, giving first responders immediate access to critical information during emergencies.

NATO will likely procure an MVNO-style solution operating on top of 5G standalone networks worldwide. This platform will be fully integrated with available satellite systems—and in this domain, Starlink holds a strong advantage as the only provider offering a high-capacity, truly global satellite solution.

**Spectrum: A Growing Strategic Battleground**

The spectrum landscape surrounding satellite communications is already complex—and becoming more so. Starlink is a prime example. It has built a global network of thousands of satellites without securing nationwide or harmonized spectrum rights in advance. Its strategy has been pragmatic: deploy first, then obtain authorization to deliver services, beginning with low-resistance use cases such as aviation, maritime connectivity, disaster zones (e.g., Florida and Haiti), and conflict regions (e.g., Ukraine and Iran).

Starlink now operates across a global spectrum environment defined by two fundamentally different regulatory models: markets like the United States, where operators buy and own spectrum, and

markets like Europe, where spectrum is licensed for a limited period. Strand Consult has long noted the challenges of European spectrum harmonization, as reflected in its analysis 10 reasons why EU spectrum harmonisation is a great idea but nearly impossible to implement.

Mobile operators have struggled to navigate this increasingly fragmented landscape. Meanwhile, Starlink continues negotiating access country by country—and with remarkable success. The service is now available in more than 150 countries, territories, and markets, delivering high-speed, low-latency connectivity to residential customers and mobile “roaming” users. Starlink's footprint spans much of North and South America, Europe, Africa, and Southeast Asia, demonstrating how a satellite operator without conventional spectrum holdings has become a dominant global player.

Strand Consult's report, Will LEO Satellite Direct-to-Cellular Networks Make Traditional Mobile Networks Obsolete?, concludes that absent global spectrum harmonization or major technical breakthroughs, D2C networks will remain a complementary, sub-scale layer—not a replacement—for terrestrial mobile infrastructure.

**Greenland: When Global Competition Collides With a Natural Monopoly**

In some countries, Starlink poses a direct threat to the viability of local telecommunications markets—Greenland being a prime example. With just 57,000 residents, Greenland relies on Tusass, its national telecommunications provider, which operates as a natural monopoly. Tusass maintains a solidarity-based pricing model in which all customers pay the same rates regardless of geography. If Starlink enters the Greenlandic market, it would severely destabilize Tusass's economic foundation, undermining its ability to sustain uniform pricing and maintain nationwide service quality. Over time, this would also constrain Tusass's capacity to make essential long-term infrastructure

investments.

With decades of global telecom experience, Strand Consult consistently highlights Greenland as a textbook case of how satellite competition can disrupt natural monopolies. The firm has addressed this repeatedly, including in online discussions and its analysis Greenland, USA, and Denmark ménage à trois – what does it mean for the telecommunications industry?

Greenland is not unique. Many countries face similar dilemmas: local operators struggle to serve remote populations sustainably, while global satellite providers can enter the market with disruptive pricing and no obligation to support national policy goals. Regulators already face complex challenges—and these challenges will only intensify.

Claims suggesting D2C-capable satellite networks will render terrestrial mobile networks obsolete overlook significant practical barriers. While LEO satellites offer unmatched reach in remote and underserved regions, they cannot match terrestrial networks on capacity, reliability, or low latency in urban and suburban settings. Dense terrestrial base-station grids support far higher traffic volumes, particularly for data-intensive services.

Regulatory and technical constraints tied to using terrestrial mobile spectrum for D2C services further limit scalability. This fragmentation—across frequencies, national authorizations, and device support—creates operational and economic inefficiencies. The result: while D2C satellite services are highly promising for bridging coverage gaps, they are not positioned to become a comprehensive alternative to terrestrial networks.

Strand Consult's report, Will LEO Satellite Direct-to-Cellular Networks Make Traditional Mobile Networks Obsolete?, concludes that absent global spectrum harmonization or major technical breakthroughs, D2C networks will remain a complementary, sub-scale layer—not a replacement—for terrestrial mobile infrastructure. ■

**Orbit unveils MPT40: A new standard for compact, high-performance, combat ready SATCOM**

Orbit Communication, a provider of airborne communications management systems, broadband land, maritime and airborne SATCOM terminals, and ground station solutions, is launching the MPT40 Multi-Platform SATCOM Terminal, a compact, lightweight and cost-effective satellite communication system designed to deliver high performance across diverse military operational environments. The new terminal provides forces with a flexible communication capability that can be deployed across multiple platforms while maintaining reliable, resilient connectivity.

Designed for true operational versatility in a GNSS denied environment, the MPT40 can be installed on military vehicles, small naval vessels or deployed by maneuvering ground forces operating in the field. The same system can be easily transferred between platforms, enabling operational flexibility and simplifying logistics while ensuring mission continuity.

With a particularly low footprint of 50x50 cm (20"x20")- the terminal is ideally suited for armored vehicles and space-constrained tactical platforms where profile, weight



and available space are critical operational considerations. The system is lightweight, easily disassembled and rapidly deployable, supporting quick field setup when mobility and responsiveness are essential.

The MPT40 supports multi-orbit satellite constellations including GEO, MEO, HEO and LEO, delivering reliable broadband connectivity anytime, anywhere. Its advanced design ensures strong performance across all elevation angles, maintaining stable communication links for command-and-control, ISR and other mission-critical applications even in

challenging operational environments.

The system complies with stringent Military Standards (810H & 461G), supports operation with virtually any modem, features electronically controlled polarization switching and incorporates a single-LRU Combat Proven architecture — an important advantage particularly for rapid installation, maintenance and operational support.

By combining compact size, high performance and cost efficiency in a single terminal, the MPT40 provides armed forces with a practical, flexible SATCOM solution suited for modern multi-domain operations.

Daniel Eshchar, CEO of Orbit, commented: "We identified a clear operational need among maneuvering forces for one versatile SATCOM system capable of supporting multiple missions and platforms. The MPT40 was designed to answer that need — delivering flexibility, strong performance and reliable connectivity in a compact solution that can move with the force and adapt to evolving operational requirements." ■

**Sama X, part of Alghanim Industries, brings satellite internet to Kuwait through Starlink**

Alghanim Industries (Kutayba Alghanim Group) has launched Starlink services in Kuwait through its technology venture Sama X, bringing SpaceX's satellite internet network to customers across the country.

As an authorized global reseller of Starlink, Sama X provides access to high-speed satellite connectivity that delivers fibre-like performance without relying on traditional ground infrastructure. The service offers reliable internet on land and at sea with typical latency as low as 20 milliseconds, supporting remote operations, critical applications, and everyday connectivity needs.

Starlink currently operates the world's

largest LEO satellite network, with more than 10,000 satellites launched since 2020. The system now delivers total network capacity of around 450 Tbps and serves more than 10 million users worldwide.

In Kuwait, Sama X will offer a range of subscription plans with download speeds exceeding 300 Mbps, along with fast delivery, professional installation, and local support, including a 24/7 bilingual call centre. The service operates in accordance with Kuwait's telecommunications regulations and the approvals issued by the relevant authorities.

"The launch of Starlink services in Kuwait

through Sama X marks an important step in strengthening the country's digital infrastructure," said Kutayba Y. Alghanim, Executive Chairman of Alghanim Industries. "At a time when reliable connectivity has become essential for business continuity and the effective functioning of key sectors, this technology provides advanced connectivity that helps organizations, governments, and communities stay connected wherever they operate — from remote worksites to critical sectors such as healthcare and education. Through this initiative, we continue to support the adoption of advanced technologies that strengthen Kuwait's digital readiness and open new opportunities for innovation and growth." ■

## Qualcomm and Wayve advance production-ready end-to-end AI for ADAS and automated driving

Qualcomm Technologies and Wayve have announced a technical collaboration that expands automaker choice with an advanced production ready ADAS and AD system for automakers worldwide. The collaboration brings Wayve AI Driver as an end to end AI driving intelligence layer to Qualcomm Technologies' high performance, field proven Snapdragon Ride consisting of system-on-chips (SoCs) and tightly integrated Active Safety software, delivering a pre integrated system that enables regulatory and hands-off ADAS deployment, expanding to broader driving environments and hands-off, eyes-off capabilities. Focused on simplifying implementation and meeting automaker priorities around safety, reliability, scalability, and time-to-market, the collaboration is generating strong interest from automakers.

"ADAS is where scale, safety, and real world impact matter most for automakers today," said Anshuman Saxena, Vice President and GM, ADAS and Robotics, Qualcomm Technologies, Inc. "Snapdragon Ride is built to support the widest range of long term platform strategies, enabling automakers to standardize across programs and regions while retaining flexibility. Together with Wayve, we're empowering automakers with more choice for how advanced driving systems are developed, deployed, and scaled, while also helping them reduce development cycles, effort and risk."

"Wayve AI Driver is designed as a flexible, vehicle-agnostic software that serves as the intelligence layer for autonomy for any vehicle, anywhere. Our collaboration with Qualcomm Technologies provides global automakers building on Snapdragon Ride with a streamlined path to deploy market-leading, end-to-end AI automated driving capability alongside Qualcomm's Active Safety stack," said Alex Kendall, Co founder and CEO of Wayve. "By combining our embodied AI driving intelligence with Qualcomm Technologies' compute



performance, platform maturity and global scale, we are expanding choice and delivering immediate value to automakers across ADAS and automated driving systems, with natural progression from hands-off to eyes-off operation."

Designed to serve as an advanced ADAS/AD foundation, the pre integrated platform enables automakers to deploy highly capable, advanced features quickly, while also enabling customization, future scaling and upgrading. By reducing the integration complexity of bringing together the SoC, active safety systems and the AI Driver, automakers can implement advanced, reliable ADAS/AD faster and with less time and effort. The system is engineered to support global deployment and long term vehicle lifecycle and platform strategies. As part of the collaboration, Qualcomm Technologies and Wayve intend to explore opportunities to leverage Qualcomm Technologies' SoCs in future Level 4 (L4) robotaxi applications.

Wayve AI Driver, a data driven AI driving software stack, learns driving behavior directly from large scale real world data, enabling adaptable performance across regions, road types, and driving environments. Snapdragon Ride with Active Safety stack brings together Qualcomm Technologies' automotive

compute leadership and high performance, energy efficient processing for on device AI within a safety certified architecture that includes redundancy, real time monitoring, and secure system isolation. Snapdragon Ride is built on an open, unified architecture that scales seamlessly from premium Snapdragon Ride Elite systems to mainstream vehicle platforms. This design helps give automakers consistent high performance and robust AI acceleration across different vehicle programs and levels of driving capability. It is also designed to provide flexibility in system design and integration, while supporting the growing need for software and AI portability and reuse across platforms, tiers, and model years.

By pre-integrating Wayve's AI Driver with Snapdragon Ride, automakers gain an additional option for a modern, proven framework to deploy advanced ADAS/AD, as well as providing a path for higher levels of driving capability over the vehicle lifecycle. This open approach aims to increase flexibility while reducing cost, complexity, and risk as compared to fragmented and closed approaches. This flexibility, combined with scalability, enables automakers to standardize across platforms and regions while retaining the ability to differentiate brand experiences and model tiers. ■

## MANTA subsea cable consortium selects MDC Data Centers as neutral landing partner in Mexico

The MANTA consortium—a strategic powerhouse comprising Liberty Networks, Gold Data, and Sparkle—has officially selected MDC Data Centers to design, build, and operate two pivotal Cable Landing Hubs (CLH) in Mexico. These state-of-the-art facilities, situated in the coastal cities of Cancun and Veracruz, will serve as the primary landing points for the MANTA subsea cable system, a transformative infrastructure project set to redefine digital connectivity across the Americas.

### Integrating Subsea and Terrestrial Ecosystems

Under the new agreements, MDC will develop a hybrid infrastructure model that integrates a traditional cable landing station with a neutral interconnection environment. This "open-access" philosophy creates a strategic point where submarine high-speed fiber connects directly with terrestrial and regional networks. By establishing these coastal gateways, the consortium ensures that international data traffic can flow seamlessly into Mexico's primary network corridors, including the high-demand hub of Queretaro, widely recognized as the country's leading interconnection center.

The MANTA system is a revolutionary subsea cable designed to bridge the United States with Central and Latin America. By providing high-bandwidth, low-latency routes, MANTA will interconnect major data hubs in Mexico City, Queretaro, Bogota, and Panama City with the USA. The system utilizes new, high-performance landing points in Cancun and Veracruz, Mexico, along with a landing site in San Blas, Florida, ensuring robust route diversity for the region.

### Leadership Perspectives on Digital Transformation

"As we build this transformative platform,



enabling open, neutral, and future-ready network environments is fundamental to our vision," said Carmine Sorrentino, Vice President and Chief Commercial & Operating Officer for the Wholesale Networks business at Liberty Networks. "That is why we partner with MDC: A trusted partner with a proven track record in delivering truly open, carrier-neutral interconnection ecosystems that accelerate innovation and unlock new opportunities for global connectivity."

Renato Tradardi, CEO of Gold Data, emphasized the importance of local integration: "This partnership reinforces our commitment to create a seamless pathway from subsea landing to Mexico's broader digital ecosystem, through open neutral interconnection points and data centers."

Mauricio Traverso, Vice President for the Americas at Sparkle, noted that these gateways would enrich the MANTA ecosystem by connecting with Sparkle's Panama Digital Gateway, further enhancing resilience for carriers, OTTs, and cloud providers.

### Engineered for Scalability and Neutrality

The facilities in Cancun and Veracruz are engineered for long-term growth. Utilizing a modular architecture, each CLH is designed to scale up to 5MW of power through 1MW increments. This scalability ensures that the hubs can adapt to the increasing demand for data center services and neutral interconnection as Mexico's digital economy matures.

For MDC Data Centers, this project represents a strategic evolution. "For MDC, the move from border to coast follows a deliberate path," explained Juan Salazar, CEO of MDC Data Centers. Having built a reputation for operating carrier-neutral facilities along the U.S.–Mexico border, MDC is now extending its "Active Neutrality" model to the coast. "The infrastructure changes, but the operating role is the same: providing the neutral environment where networks converge."

By combining robust cable landing infrastructure with neutral, multi-carrier environments, these new hubs will provide critical entry points for international connectivity, strengthening Mexico's digital backbone and fostering a more connected Latin America. ■

## Mobile Ecosystem Forum appoints new Board members following global elections

The Mobile Ecosystem Forum (MEF), the global trade association for the mobile ecosystem, has announced the results of its 2026 Board elections, appointing five newly elected Directors to help guide the organisation's global strategy.

Elections took place recently, and the new Board members were announced at the MEF Global Forum in Casa Llotja de Mar in Barcelona.

There were five positions up for election, and the newly elected Directors are:

**Dr Marco Lafrentz, VP Business & Market Development, netnumber**

**Amelia Newsom-Davis, Director - Payment, Messaging and Identity, Orange**

**Robert Gerstmann, Chief Evangelist & Co-Founder, Sinch**

**Claudine Bell, Partner Business Manager – Messaging & Payments, Telefonica**

**Dr Andreas Mann, Senior Portfolio Manager, Messaging, Vodafone**

They will join existing Board members:

**Dario Betti - CEO, Mobile Ecosystem Forum**

**Rafael Pellon – Partner, Pellon de Lima Advogados**

**Stephanie Lashley, VP Messaging Strategic Alliances & Infrastructure, Bandwidth Inc.**

**Ramy Riad, Director, Innovation & Messaging Strategy, Cisco**

**Matthew Bisoffi, Head of Business Management, Operations & Insights, CKH IOD**

**Rajiv Singla, CEO Global Messaging, Globe TeleServices (GTS)**

**Brian Darcy, Director Global Telecoms**



Dario Betti, CEO of Mobile Ecosystem Forum

**Business Development, Infobip**

**Waheed Adam, Executive Chairman, iTouch Messaging Services**

**Tim Ward, Fellow, Xconnect**

The newly elected Directors represent a diverse range of companies and expertise across messaging, connectivity, security, and digital infrastructure, reinforcing MEF's leadership across the global mobile ecosystem.

Over the coming year, the Board will focus on advancing innovation across messaging, strengthening anti-fraud initiatives, and promoting privacy, trust, and sustainable growth across the mobile ecosystem.

Each candidate was required to submit a short video outlining what they can offer the Board, and MEF members voted for their

preferred candidates. Voting took place online and all full members of MEF were eligible to vote.

"MEF's Board attracts some of the brightest talent in the mobile ecosystem, who work together to set the strategy for the organisation and ensure good governance. As a global organisation, covering the entire mobile ecosystem I am pleased once again to see our Board reflect this range of expertise." said MEF CEO Dario Betti.

The Mobile Ecosystem Forum (MEF) is a global trade body established in 2000 and headquartered in the UK with members across the world. As the voice of the mobile ecosystem, it focuses on cross-industry best practices, anti-fraud and monetisation. The Forum provides its members with global and cross-sector platforms for networking, collaboration and advancing industry solutions. ■

## From ambition to execution: How Open Gateway is scaling Global API economy

Henry Calvert, Head of Networks, GSMA



Three years since we unveiled it at MWC23 Barcelona, Open Gateway has moved from ambition to execution. Our ambition then was to transform mobile networks into a global platform of easily consumable, standardised APIs for developers, enterprises and cloud providers.

Today, 86 operator groups, representing more than 300 networks and 80% of global mobile connections, are aligned around a common API framework. Alongside them, more than 60 channel partners - spanning hyperscalers, aggregators and CPaaS providers -- are commercialising network APIs at scale.

Together, we are seeing significant effort towards creating what the industry has always needed: a consistent, multimarket, cross-operator API environment that finally makes "write once, deploy everywhere" a reality.

### Turning APIs into Real World Impact

What began with eight CAMARA APIs in 2023 has evolved into a commercially

active portfolio. Today, we've seen more than 300 instances of 20 different CAMARA APIs commercially launched in 65 markets around the world, from Canada down to Chile and from the United States across to New Zealand. They're tackling real-world problems with tangible solutions that boost security, reduce friction and enable new digital experiences. Including:

- **Fraud prevention:** Multi-operator launches in dozens of countries around the world are enabling banks and retailers to verify identity, detect SIM swap fraud, and secure transactions in real time.

- **Quality on Demand:** Increasingly adopted for enterprise connectivity, QoD enables applications to request enhanced network performance for online payments, streaming, gaming, autonomous vehicles, drone safety and other mission-critical operations.

- **Mobility and location:** APIs enabling edge discovery, geofencing, and device intelligence are expanding the ability of developers to optimise application

performance dynamically.

We now have more than 60 technology channel partners, including sector specialists, working with mobile operators to embed APIs into the enterprise. Over the past year, we seen examples like Orange and Shabodi working together to transform manufacturing, China Mobile doubling in-app advertising conversation rates through the CAMARA number verification solution, and UK banks detecting SIM-swap scams at scale in real time.

In addition, GSMA Fusion is helping enterprises by acting as a demand side bridge between industries and the global mobile ecosystem, making it easier for businesses to access, influence, and benefit from advanced mobile network capabilities through standardised APIs.

Rather than enterprises adapting to what networks happen to offer, Fusion enables sectors such as automotive, aviation, fintech, manufacturing, media and entertainment to collectively define what they need from connectivity—latency,

reliability, security, identity, location, or prioritisation—across multiple markets. We've seen Tata Elxsi call on MNOs to standardise QoD APIs for the automotive and drone industries, FICO call for more markets to support Scam Signal to tackle scams, resulting in positive new developments in South Africa. Plus Skydio, request support from the MNO community to aid how drones can better support emergency service first responders.

**Why Developers Are Embracing Network APIs**

Beyond industry membership, a crucial measure of success is developer and enterprise uptake – because at the end of the day, awareness will not translate into adoption if these tools are inaccessible or do not contribute towards commercial scale. We have been successful in bridging this gap in several ways.

Firstly, by solving the long-standing fragmentation challenge and facilitating consistent cross-operator behaviour. Secondly, CAMARA-standardized APIs have been crucial in enabling developers to deploy solutions and applications consistently across markets, while improved exposure platforms enable easier onboarding and application testing.

Also, let's not overlook the importance of meeting developers where they are – network APIs that have taken off are closely aligned with developer priorities. In our latest Open Gateway State of the Market report, we found that fraud prevention remains the most appealing use case for developers, followed closely by facilitating mobile payments.

**What Comes Next: Agentic AI and the Acceleration of API Deployment**

Many of this week's announcements and demos at MWC Barcelona also point to the next opportunity: AI-driven automation. Across the industry, there is growing evidence that agentic AI, autonomous software agents that can plan tasks, reason over multiple data sources, and interact

with external systems, is poised to reshape how network APIs are exposed, discovered and consumed.

Telefónica and Nokia are among the leaders experimenting with this new paradigm. Their collaborative pilots use Agent-to-Agent (A2A) protocols and the Model Context Protocol (MCP) to orchestrate tasks across AI agents, enabling automatic API discovery, intelligent selection of network capabilities, chaining of multiple APIs, secure entitlement checking and goal-driven workflows without manual intervention. We've also seen other demos from Mplify with Colt, Orange and Google Cloud, as well as Nokia and AWS with Orange and du.

In practical terms, agentic AI turns static APIs into dynamic, self-optimising building blocks, enabling enterprises to integrate telco capabilities into their systems with minimal effort. For example, a fraud-prevention agent could autonomously request SIM-swap or device-swap verification from multiple operators in real time; a QoD-enabled video workflow could self-adjust based on network conditions, requesting enhanced capacity only when needed. Likewise, IoT, aviation, automotive, and industrial systems can autonomously negotiate performance requirements or identity checks.

**The Path to a Fully Programmable Network Economy**

The next phase will be defined not by APIs alone, but by the intelligence layered on top of them. Agentic AI will make APIs easier to use, faster to deploy, and more interoperable, lowering barriers for developers and unlocking the next generation of programmable network services. The result? A future where connectivity is programmed rather than consumed as passive infrastructure – and interoperable at scale.

Open Gateway has laid the foundation. Agentic AI will accelerate it. And together, they will set the blueprint for the next decade of telecom innovation. ■

**Aduna accelerates global network APIs adoption with major ecosystem expansion at MWC 2026**

Aduna has announced at Mobile World Congress (MWC) 2026 key growth milestones demonstrating the acceleration and international adoption of telecom network APIs. Aduna is now partnered with 15 leading digital identity, fraud prevention, and communications providers with more lined up to join the Aduna ecosystem.

The momentum builds on Aduna's 2025 strategic partnership with Comviva. Through this collaboration, CAMARA-based aggregated network APIs will also be made available via AWS, expanding enterprise access to standardized telecom capabilities through a trusted cloud platform.

Launched in July 2025 as a joint venture between Ericsson and 12 of the world's leading telecom operators — including AT&T, T-Mobile, Verizon, Deutsche Telekom, Orange, Telefonica, Vodafone, Bharti Airtel, Jio, KDDI, Singtel and Telstra — Aduna was created to provide global access to standardized, interoperable network APIs through a single, unified platform.

Built on the open-source CAMARA initiative led by the GSMA and the Linux Foundation, Aduna simplifies developer access to advanced mobile network capabilities across carriers worldwide. The platform serves as a convergence point for aggregators, hyperscalers, solution providers and digital-native enterprises seeking to scale services globally without the complexity of fragmented telecom integrations. ■

**GLOBAL ICT, TELECOM & SATCOM EVENTS 2026**

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|--|--|--|
| <p><b>01</b> April 2026</p> <p><b>SAMENA LEADERS' SUMMIT 2026</b></p> <p>Dubai, UAE</p>                        | <p><b>20-22</b> May 2026</p> <p><b>COMMUNIC ASIA</b></p> <p>Singapore</p>            | <p><b>13-15</b> October 2026</p> <p><b>NETWORK X</b></p> <p>Messe Wien Vienna, Austria</p>   |
| <p><b>07-09</b> April 2026</p> <p><b>GITEX AFRICA Morocco</b></p> <p>Marrakesh</p>                             | <p><b>20-22</b> May 2026</p> <p><b>SatelliteAsia</b></p> <p>Singapore</p>            | <p><b>27-28</b> October 2026</p> <p><b>TELECOMSWORLD Asia</b></p> <p>SEE YOU AT ASIA'S NO.1 TELCO EVENT</p> <p>Bangkok, Thailand</p> |
| <p><b>09-10</b> April 2026</p> <p><b>GITEX ASIA Singapore</b></p> <p>Singapore</p>                             | <p><b>02-04</b> June 2026</p> <p><b>CABSAT</b></p> <p>Dubai, UAE</p>                 | <p><b>02-05</b> November 2026</p> <p><b>GLOBAL MILSATCOM</b></p> <p>CONFERENCE &amp; EXHIBITION</p> <p>London, UK</p>                |
| <p><b>13-16</b> April 2026</p> <p><b>LEAP</b></p> <p>Riyadh, KSA</p>   | <p><b>02-04</b> June 2026</p> <p><b>SATEXPO</b></p> <p>Dubai, UAE</p>                | <p><b>09-10</b> November 2026</p> <p><b>CONNECTED WORLD</b></p> <p>Riyadh, KSA</p>   |
| <p><b>20-21</b> April 2026</p> <p><b>DCD Connect   MENA</b></p> <p>Dubai, UAE</p>                              | <p><b>24-26</b> June 2026</p> <p><b>MWC Shanghai • 上海</b></p> <p>Shanghai, China</p> | <p><b>17-19</b> November 2026</p> <p><b>AFRICA TECH FESTIVAL</b></p> <p>Cape Town, SA</p>  |
| <p><b>05-07</b> May 2026</p> <p><b>معرض ومؤتمر الخليج العالمي للمعلومات GISEC GLOBAL</b></p> <p>Dubai, UAE</p> | <p><b>11-14</b> September 2026</p> <p><b>ib</b></p> <p>Amsterdam, Netherlands</p>    | <p><b>08-11</b> December 2026</p> <p><b>GITEX GLOBAL</b></p> <p>Dubai, UAE</p>   |



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